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IDENTIFIERS	*Energy Education; Information Analysis Products

ABSTRACT

This is a compilation of abstracts from "Resources in Education" for publications relating to energy education. The publications announced relate to energy education by being: (1) instructional materials such as teaching activity guides; (2) teacher resource guides; (3) information sources on energy resources; or (4) school building conservation materials. Information given for each entry includes: (1) ERIC and clearinghouse accession numbers; (2) title; (3) author; (4) descriptors; (5) EDRS price; (6) abstract; and (7) institution or sponsoring agency name. The abstracts are descriptive paragraphs which indicate the contents of each publication. Over 500 publications are included in this bibliography. Subject, author, and institutional author indices are included to aid the user in locating a particular publication in this bibliography. (MR)

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ENVIRONMENTAL EDUCATION INFORMATION REPORT

ED166067

SE 026 730

THE ERIC SCIENCE, MATHEMATICS AND ENVIRONMENTAL EDUCATION CLEARINGHOUSE
in cooperation with
Center for Science and Mathematics Education
The Ohio State University

Compiled by
Milton Rinehart
Robert W. Howe
M. James Kozlow

ENERGY EDUCATION
A Bibliography of Abstracts from Resources in Education (RIE) from 1966-1978

Science, Mathematics, and Environmental Education
Information Reference Center
1200 Chambers Rd., Third Floor
Columbus, Ohio 43212

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Preface

COVERAGE

This publication contains abstracts and indexes to selected documents announced in Resources in Education (RIE) from 1966 to 1978. The compilation is designed to serve as an effective tool to assist teachers, researchers, curriculum developers, librarians, administrators and others concerned with science education. Supplements will be issued periodically.

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I. How to Use the Compilation

A. ABSTRACT LISTING

Each abstract is listed by ED number in numerical order in the Abstract Entry section. A sample of an abstract is provided below to show how to locate the ED number, author, source, and other items in the abstract.

1. ACCESSION NUMBER: ED157681
   CLEARINGHOUSE NUMBER: SE022840
2. PUBLICATION DATE: 75
3. TITLE: A Curriculum Activities Guide to Electric Power Generation and the Environment.
4. PERSONAL AUTHOR: Randolph R. Tully, Jr.
   INSTITUTION CODE: 8806277
5. DESCRIPTOR: Curriculum Guides; *Elementary Secondary Education; *Energy Conservation; *Environmental Education; *Instructional Materials; Learning Activities; Natural Resources; Science Activities; Science Education; Teacher Developed Materials; Values
6. IDENTIFIER: Project KARE
7. EDRS PRICE: EDRS Price MF-$0.83 HC-$8.69 Plus Postage
8. DESCRIPTIVE NOTE: 154p.; For related documents, see SE 022 841-842.
9. ISSUE: RIEDEC1978
10. ABSTRACT: This guide was developed by teachers involved in a workshop on "Electric Power Generation and the Environment." Activity topics are: (1) Energy and the Consumer; (2) Energy and Water Pollution; and (3) Energy and Air Pollution. Within these topics, the activities are classified as awareness level, transitional level, or operational level. Each activity contains an introduction, questions, equipment list, and procedure. There are over 70 activities for students in grades 1-12. The appendix provides a brief description of the development of the learning
11. activities in this guide. (MA)
12. INSTITUTION NAME: Project KARE

1. ERIC accession number--identification number sequentially assigned to documents as they are processed.
2. Date published.
3. Title.
4. Author(s).
5. Descriptors--subject terms which characterize substantive contents. The major terms are preceded by an asterisk.
6. Identifiers--additional identifying terms not found in the Thesaurus of ERIC Descriptors.
7. EDRS price--price through ERIC Document Reproduction Service. "MF" means microfiche; "HC" means hard copy. When listed "not available from EDRS" other sources are cited.
8. Descriptive note; pagination.
9. Issue of Resources in Education (RIE) in which article originally appeared.
10. Informative abstract.
11. Abstractor's initials.
12. Organization where document originated.

B. HOW TO LOCATE DESIRED MATERIALS

Users can identify documents of interest by scanning the abstract listings, or using the Subject Index, Author Index, and Institutional Author Index.

Subject Index

The Subject Index is designed to enable the user to search for information on either a broad subject or a narrow information concern. An ED number is included for each document listed under the subject heading. The ED number refers to the abstract entry in the abstract section where complete bibliographic information, an abstract of the document, and availability information can be found.

A user can also coordinate a search by checking ED numbers that appear under two or more subject headings. For example, you could check all the ED numbers under Environmental Education and all the ED numbers under Secondary Schools. ED numbers included under both subject headings would include information relevant to environmental education for secondary schools. A check of ED numbers under Environmental Education and Elementary Schools would provide a list of materials related to environmental education at the elementary school level. Similar techniques could be used to narrow the information desired. You could check Environmental Education, Secondary Schools, and Instructional Materials or Learning Activities to identify some materials for teaching environmental education at the secondary school level.

Users with ERIC microfiche should check the abstract entry. If the document is available on microfiche from the ERIC Document Reproduction Service, the availability will be indicated by "MF" on the abstract by "EDRS Price." This means libraries with ERIC microfiche collections should have the document on microfiche.

If you want a document available through EDRS see the section on ordering documents.

Author Index and Institutional Author Index

If you desire to locate a document by the name of the author, you can use the Author Index. ED numbers are provided under the author in the Author Index as in the Subject Index. Some documents do not have a listed author. These documents are listed under the name of the institution or organization responsible for developing the document in the Institutional Author Index. Both sources can be used to help you locate documents.

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For further information write:

Science, Mathematics, and Environmental Education
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Columbus, Ohio 43212

Abstract Entries

ACCESSION NUMBER: ED003207

PROGRAM AREA: 56

PUBLICATION DATE: 61

TITLE: ATOMIC PHYSICS, AN AUTOINSTRUCTIONAL PROGRAM, VOLUME 4, SUPPLEMENT.

PERSONAL AUTHOR: DETERLINE, WILLIAM A.; KLAUS, DAVID J.

INSTITUTION CODE: SYN02100

DESCRIPTOR: *AUTOINSTRUCTIONAL AIDS; EXPERIMENTAL PROGRAMS; LEARNING PROCESSES; *NUCLEAR PHYSICS; *PHYSICS INSTRUCTION; *PROGRAMED TEXTS; PENNSYLVANIA; PITTSBURGH

EDRS PRICE: EDRS PRICE MF-$0.75 HC-$9.00 PLUS POSTAGE

DESCRIPTIVE NOTE: 182P.

ISSUE: RM0667

ABSTRACT: THE AUTOINSTRUCTIONAL MATERIALS IN THIS TEXT WERE PREPARED FOR USE IN AN EXPERIMENTAL STUDY, OFFERING SELF-TUTORING MATERIAL FOR LEARNING ATOMIC PHYSICS. THE TOPICS COVERED ARE (1) RADIATION USES AND NUCLEAR FISSION, (2) NUCLEAR REACTORS, (3) ENERGY FROM NUCLEAR REACTORS, (4) NUCLEAR EXPLOSIONS AND FUSION, (5) A COMPREHENSIVE REVIEW, AND (6) A FINAL SUMMARY. (RS)

REPORT NUMBER: AIR-C16-9/61-RP/4/; NDEA-VIIA-337 VOL. 4 SUPPL.

INSTITUTION NAME: AMERICAN INST. FOR RESEARCH IN BEHAVIORAL SCIENCES, PITTSBURGH, PA.

ACCESSION NUMBER: ED013201

CLEARINGHOUSE ACCESSION NUMBER: SE001484

PUBLICATION DATE: MAR67

TITLE: RADIOISOTOPE TECHNIQUES FOR INSTRUCTION IN THE BIOLOGICAL SCIENCES, A LIST OF ANNOTATED REFERENCES.

PERSONAL AUTHOR: HURLBURT, EVELYN M.

INSTITUTION CODE: X1EU4840

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; *BIOLOGY; *COLLEGE SCIENCE; JUNIOR COLLEGES; LABORATORY EXPERIMENTS; *RADIATION BIOLOGY; *RADIOISOTOPES; SECONDARY SCHOOL SCIENCE; BIOLOGICAL SCIENCES CURRICULUM STUDY; UNITED STATES ATOMIC ENERGY COMMISSION

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS.

ISSUE: CURREPT

ABSTRACT: REFERENCES TO BIOLOGICAL EXPERIMENTS THAT EMPHASIZE THE USE OF RADIOISOTOPES AS TRACERS ARE INCLUDED IN THIS ANNOTATED BIBLIOGRAPHY. MATERIALS INCLUDED ARE CONSIDERED TO BE READILY AVAILABLE AND WERE PUBLISHED AFTER 1960. SECTION I IS COMPOSED OF SELECTED SOURCES. ENTRIES INCLUDE (1) COMPLETE CITATIONS, (2) A BRIEF ANNOTATION, AND (3) LISTS OF BASIC AND GENERAL EXPERIMENTS. IN SECTION II EXPERIMENTS ARE LISTED ACCORDING TO THE PRINCIPLES DEVELOPED BY THE ACTIVITIES. SECTION III IS A CROSS REFERENCE WHICH RELATES EXPERIMENTS TO THE MAJOR CONCEPTUAL SCHEMES OF THE BIOLOGICAL SCIENCE CURRICULUM STUDY PROGRAM. LISTS OF SELECTED READINGS IN NUCLEAR SCIENCE AND SUPPLIERS OF RADIOISOTOPES ARE APPENDED. THIS DOCUMENT IS AVAILABLE AS TID-21202 FOR $3.00 FROM THE CLEARINGHOUSE FOR FEDERAL SCIENTIFIC AND TECHNICAL INFORMATION, NATIONAL BUREAU OF STANDARDS, U.S. DEPARTMENT OF COMMERCE, SPRINGFIELD, VIRGINIA, 22151. (AG)

REPORT NUMBER: TID-21202-REV

INSTITUTION NAME: ATOMIC ENERGY COMMISSION, OAK RIDGE, TENN. DIV. OF TECHNICAL INFORMATION.

ACCESSION NUMBER: ED013754

CLEARINGHOUSE ACCESSION NUMBER: SE001043

PUBLICATION DATE: SEP66

TITLE: RADIOISOTOPE EXPERIMENTS IN HIGH SCHOOL BIOLOGY, AN ANNOTATED SELECTED BIBLIOGRAPHY.

PERSONAL AUTHOR: HURLBURT, EVELYN M.

INSTITUTION CODE: X1EU4840

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; *BIOLOGY; CHEMISTRY; *INSTRUCTIONAL MATERIALS; PHYSICS; *RADIATION BIOLOGY; RADIOISOTOPES; REFERENCE MATERIALS; *SCIENCE ACTIVITIES; *SECONDARY SCHOOL SCIENCE; UNITED STATES ATOMIC ENERGY COMMISSION

EDRS PRICE: EDRS PRICE MF-$0.75 HC-$1.85 PLUS POSTAGE

DESCRIPTIVE NOTE: 26P.

ISSUE: CURREPT

ABSTRACT: SELECTED REFERENCES ON THE USE OF RADIOISOTOPES IN BIOLOGY ARE CONTAINED IN THIS ANNOTATED BIBLIOGRAPHY FOR SECONDARY SCHOOL STUDENTS. MATERIALS INCLUDED WERE PUBLISHED AFTER 1960 AND DEAL WITH THE PROPERTIES OF RADIATION, SIMPLE RADIATION DETECTION PROCEDURES, AND TECHNIQUES FOR USING RADIOISOTOPES EXPERIMENTALLY. THE REFERENCES ARE LISTED IN ORDER OF THEIR VALUE TO A TYPICAL HIGH SCHOOL BIOLOGY PROGRAM IN TERMS OF VARIETY, FLEXIBILITY, AND APPLICABILITY. EXPERIMENTS IN EACH REFERENCE ARE CLASSIFIED AS BASIC OR BIOLOGICAL. SPECIAL TECHNIQUES OR MATERIALS REQUIRED IN THEIR COMPLETION ARE INDICATED. SOURCES OF RADIOISOTOPE EXPERIMENTS FOR HIGH SCHOOL CHEMISTRY AND PHYSICS, A LIST OF GENERAL READINGS IN NUCLEAR SCIENCE, AND A LIST OF SUPPLIERS OF RADIOISOTOPES ARE INCLUDED. THIS DOCUMENT IS AVAILABLE FREE FROM THE UNITED STATES ATOMIC ENERGY COMMISSION, P. O. BOX 62, OAK RIDGE, TENNESSEE 37830. (AG)

INSTITUTION NAME: ATOMIC ENERGY COMMISSION, OAK RIDGE, TENN. DIV. OF TECHNICAL INFORMATION.

ACCESSION NUMBER: ED018366

CLEARINGHOUSE ACCESSION NUMBER: SE004095

PUBLICATION DATE: 67

TITLE: GUIDE TO OPPORTUNITIES FOR EDUCATION, TRAINING AND RESEARCH IN THE SCIENCES.

PERSONAL AUTHOR: FIELD, STANLEY

DESCRIPTOR: *DIRECTORIES; *EDUCATIONAL OPPORTUNITIES; *EDUCATIONAL PROGRAMS; ELEMENTARY SCHOOL TEACHERS; ENGINEERING; FELLOWSHIPS; *FINANCIAL SUPPORT; FOUNDATION PROGRAMS; GRADUATE STUDY; HIGH SCHOOL STUDENTS; INDUSTRY; INSERVICE TEACHER EDUCATION; *NATURAL SCIENCES; RESEARCH; SCHOLARSHIP FUNDS; *SCIENCE EDUCATION; SCIENTIFIC RESEARCH; TEACHER EDUCATION; *UNDERGRADUATE STUDY; ATOMIC ENERGY COMMISSION; NATIONAL SCIENCE FOUNDATION

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS.

ISSUE: CURREPT

ABSTRACT: THIS GUIDE TO EDUCATIONAL OPPORTUNITIES IN THE SCIENCES IS INTENDED TO PROVIDE A COMPREHENSIVE AND CONVENIENT REFERENCE FOR GUIDANCE COUNSELORS, STUDENTS, SCHOLARS, RESEARCHERS, EDUCATORS, AND ADMINISTRATORS, BRINGING TOGETHER WIDELY SCATTERED INFORMATION THAT HITHERTO HAS BEEN DIFFICULT TO OBTAIN. CHAPTER 1 DEALS EXCLUSIVELY WITH NATIONAL SCIENCE FOUNDATION (NSF) PROGRAMS--PARTICULARLY WITH (1) PRE-COLLEGE EDUCATION IN SCIENCE, (2) UNDERGRADUATE EDUCATION IN SCIENCE, AND (3) GRADUATE EDUCATION IN SCIENCE. CHAPTER 2 DESCRIBES PROGRAMS JOINTLY SPONSORED BY THE NSF AND THE ATOMIC ENERGY COMMISSION (AEC) WHICH PROVIDE OPPORTUNITIES IN NUCLEAR SCIENCE AND ENGINEERING. OPPORTUNITIES FOR GRADUATE FELLOWSHIPS FOR PROSPECTIVE COLLEGE TEACHERS ARE DISCUSSED IN CHAPTER 3, WHICH DEALS WITH THOSE PROGRAMS SUPPORTED BY GRANTS THROUGH THE NATIONAL DEFENSE EDUCATION ACT OF 1958 ADMINISTERED BY THE U.S. OFFICE OF EDUCATION. PARTICIPATING SCHOOLS ARE LISTED. PUBLIC HEALTH SERVICE AWARDS ARE ALSO DISCUSSED. OPPORTUNITIES IN SPACE SCIENCE, LARGELY UNDER THE SPONSORSHIP OF THE NATIONAL AERONAUTICS AND SPACE ADMINISTRATION (NASA) ARE PRESENTED IN CHAPTER 4. DISCUSSED IN CHAPTER 5 ARE MANY POST-DOCTORAL RESEARCH ASSOCIATESHIPS, WHICH ARE AVAILABLE FROM THE NATIONAL ACADEMY OF SCIENCES THROUGH ITS NATIONAL RESEARCH COUNCIL. CIVIL SERVICE AND ARMED FORCES PROGRAMS ARE DESCRIBED IN CHAPTER 6. PRIVATE FOUNDATION PROGRAMS IN CHAPTER 7, PRIVATE INDUSTRY PROGRAMS IN CHAPTER 8, AND THE PROGRAMS OF PROFESSIONAL SOCIETIES IN CHAPTER 9. IN EACH INSTANCE THE AMOUNT OF SUPPORT, THE CONDITIONS OF ELIGIBILITY, AND APPLICATION INFORMATION ARE GIVEN. A BRIEF DESCRIPTION OF THE PURPOSE OF THE GRANT, THE NUMBER AWARDED, AND THE SCOPE AND LIMITATIONS ARE DISCUSSED ALSO. THE VOLUME IS INDEXED FOR RAPID USE BY THE FOLLOWING CATEGORIES--(1) ELEMENTARY SCHOOL STUDENTS, (2) HIGH SCHOOL STUDENTS, (3) COLLEGE UNDERGRADUATES, (4) GRADUATE STUDENTS, (5) POSTDOCTORAL, (6) ELEMENTARY SCHOOL TEACHERS, (7) HIGH SCHOOL TEACHERS, (8) COLLEGE FACULTY, (9) ELEMENTARY SCHOOL SUPERVISORS, (10) HIGH SCHOOL SUPERVISORS, (11) INSTITUTIONAL ASSISTANCE, (12) SCIENTIFIC RESEARCHERS, (13) LECTURERS, (14) NURSES, (15) ENLISTED MILITARY PERSONNEL, (16) MILITARY RETIREES, AND (17) WOMEN ONLY. THIS DOCUMENT IS AVAILABLE FOR $6.00 FROM PUBLIC AFFAIRS PRESS, 419 NEW JERSEY AVENUE, S.E., WASHINGTON, D.C. (AM)

ACCESSION NUMBER: ED020112

CLEARINGHOUSE ACCESSION NUMBER: SE003731

PUBLICATION DATE: SEP67

TITLE: ENERGY, A SCIENCE UNIT FOR THE UPPER ELEMENTARY GRADES, TEACHER'S GUIDE.

PERSONAL AUTHOR: DAVIS, JOSEPH ; AND OTHERS

INSTITUTION CODE: C1U11450

DESCRIPTOR: *ELEMENTARY SCHOOL SCIENCE; *ENERGY; GRADE 5; GRADE 6; *INSTRUCTION; PHYSICAL SCIENCES; *SCIENCE ACTIVITIES; *TEACHING GUIDES; NATIONAL SCIENCE FOUNDATION

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS.

ISSUE: CURREPT

ABSTRACT: PREPARED UNDER THE SPONSORSHIP OF THE SCIENCE CURRICULUM IMPROVEMENT STUDY, THIS TRIAL EDITION OF A TEACHER'S GUIDE FOR A UNIT ON ENERGY IS INTENDED FOR USE AT THE FIFTH AND SIXTH GRADE LEVELS. THE UNIT IS DESIGNED ESSENTIALLY AROUND PUPIL-CENTERED ACTIVITIES WHICH REQUIRE BOTH QUANTITATIVE AND QUALITATIVE OBSERVATIONS. THE ACTIVITIES IN PART I OF THE STUDENT MANUAL INVOLVE INVESTIGATIONS AND OBSERVATIONS DEALING WITH ICE CALORIMETRY, AND THOSE IN PART II INVOLVE ENERGY OF COMBUSTION AND HEAT TRANSFER. PARTS III AND IV OF THE UNIT ELABORATE UPON THESE IDEAS, AND INVOLVE CHANGES IN PHASE. THE GENERAL INTRODUCTORY SECTION OF THE GUIDE INCLUDES MATERIAL ON (1) THE THEORETICAL BACKGROUND FOR THE UNIT ON ENERGY, (2) TEACHING TECHNIQUES, AND (3) A MATERIALS LIST. EACH CHAPTER TREATS A SEPARATE ACTIVITY, CORRESPONDING TO THE STUDENT MANUAL, AND INCLUDES (1) A MATERIALS LIST FOR THE SPECIFIC ACTIVITY TO BE STUDIED, (2) TEACHING SUGGESTIONS, (3) ADVANCE PREPARATION REQUIREMENTS, (4) DISCUSSION OF PROCEDURE IN THE STUDENT MANUAL, (5) PREPARATION DIRECTIONS FOR THE NEXT ACTIVITY, AND (6) SUGGESTED OPTIONAL ACTIVITIES. THIS DOCUMENT IS AVAILABLE FROM THE SCIENCE CURRICULUM IMPROVEMENT STUDY, UNIVERSITY OF CALIFORNIA, BERKELEY, CALIFORNIA 94720. (AM)

INSTITUTION NAME: CALIFORNIA UNIV., BERKELEY. SCIENCE CURRICULUM IMPROVEMENT STUDY.

ACCESSION NUMBER: ED020113

CLEARINGHOUSE ACCESSION NUMBER: SE003732

PUBLICATION DATE: SEP67

TITLE: ENERGY; A SCIENCE UNIT FOR THE UPPER ELEMENTARY GRADES, STUDENT MANUAL.

PERSONAL AUTHOR: DAVIS, JOSEPH I AND OTHERS

INSTITUTION CODE: C1U11450

DESCRIPTOR: *ELEMENTARY SCHOOL SCIENCE; *ENERGY; GRADE 5; GRADE 6; HEAT; *INSTRUCTIONAL MATERIALS; *LABORATORY MANUALS; PHYSICAL SCIENCES; PHYSICS; *SCIENCE ACTIVITIES; *TEXTBOOKS; NATIONAL SCIENCE FOUNDATION

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS.

ISSUE: CURREPT

ABSTRACT: PREPARED UNDER THE SPONSORSHIP OF THE SCIENCE CURRICULUM IMPROVEMENT STUDY, THIS TRIAL EDITION OF A STUDENT MANUAL FOR A UNIT ON ENERGY IS INTENDED FOR USE AT THE FIFTH AND SIXTH GRADE LEVELS. IT IS DESIGNED ESSENTIALLY AROUND PUPIL-CENTERED ACTIVITIES WHICH REQUIRE BOTH QUANTITATIVE AND QUALITATIVE OBSERVATIONS. THE ACTIVITIES IN PART I INVOLVE INVESTIGATIONS AND OBSERVATIONS DEALING WITH ICE CALORIMETRY; AND THOSE IN PART II INVOLVE ENERGY OF HEAT TRANSFER AND COMBUSTION. PARTS III AND IV OF THE UNIT ELABORATE UPON THESE IDEAS, MAKING USE OF MORE ADVANCED CONCEPTS. THE MANUAL PROVIDES SPACE FOR RECORDING DATA AND OBSERVATIONS AS WELL AS FOR STUDENT RESPONSES TO QUESTIONS. THIS DOCUMENT IS AVAILABLE FROM THE SCIENCE CURRICULUM IMPROVEMENT STUDY, UNIVERSITY OF CALIFORNIA, BERKELEY, CALIFORNIA 94720. (DM)

INSTITUTION NAME: CALIFORNIA UNIV., BERKELEY. SCIENCE CURRICULUM IMPROVEMENT STUDY.

ACCESSION NUMBER: ED028631

CLEARINGHOUSE ACCESSION NUMBER: EF003197

PUBLICATION DATE: MAY 67

TITLE: ENERGY INTEGRATED DESIGN OF LIGHTING, HEATING, AND COOLING SYSTEMS, AND ITS EFFECT ON BUILDING ENERGY REQUIREMENTS.

PERSONAL AUTHOR: MECKLER, GERSHON

DESCRIPTOR: *AIR CONDITIONING; BUILDING DESIGN; CLIMATE CONTROL; CONTROLLED ENVIRONMENT; *ENERGY; *FACILITY REQUIREMENTS; *HEATING; INTERIOR SPACE; *LIGHTING; MECHANICAL EQUIPMENT; REFRIGERATION MECHANICS; THERMAL ENVIRONMENT

EDRS PRICE: EDRS PRICE MF-$0.75 HC-$1.50 PLUS POSTAGE

DESCRIPTIVE NOTE: 22P.; PAPER PRESENTED AT TECHNICAL CONFERENCE OF IEEE INDUSTRIAL AND POWER SYSTEMS COMMITTEE, MAY 1967 CONFERENCE REPORT RECORD, 34 C 55

ISSUE: RIESEP69

ABSTRACT: COMMENTS ON THE NEED FOR INTEGRATED DESIGN OF LIGHTING, HEATING, AND COOLING SYSTEMS. IN ORDER TO ELIMINATE THE PENALTY OF REFRIGERATING THE LIGHTING HEAT, MINIMIZE THE BUILDING NON-USABLE SPACE, AND OPTIMIZE THE TOTAL ENERGY INPUT, A "SYSTEMS APPROACH" IS RECOMMENDED. THIS SYSTEM WOULD EMPLOY HEAT-RECOVERY TECHNIQUES BASED ON THE ABILITY OF THE SYSTEM TO MINIMIZE THE REFRIGERATION AND AIR HANDLING EQUIPMENT AS WELL AS THE SYSTEM ENERGY ASSOCIATED WITH LIGHTING HEAT REMOVAL. AN ADDITIONAL FEATURE OF THIS SYSTEM IS ITS ABILITY TO UTILIZE THE SAME EQUIPMENT TO PROVIDE HEATING REQUIREMENTS OF THE BUILDING. LABORATORY TESTS ARE CITED WITH ILLUSTRATIONS. (AM)

AVAILABILITY: INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, 345 E. 47TH STREET, NEW YORK, N.Y. 10017; GERSHON MECKLER, ENVIRONMENTAL SYSTEMS CORP., CONYERS, GEORGIA

ACCESSION NUMBER: ED024908

CLEARINGHOUSE ACCESSION NUMBER: EF003196

PUBLICATION DATE: JUL 64

TITLE: ENERGY INTEGRATED LIGHTING-HEATING-COOLING SYSTEM.

PERSONAL AUTHOR: MECKLER, GERSHON; AND OTHERS

DESCRIPTOR: AIR CONDITIONING; *BUILDING DESIGN; BUILDINGS; *CONTROLLED ENVIRONMENT; ELECTRICITY; *ENERGY; HEAT; HEATING; LIGHT; *MECHANICAL EQUIPMENT; *OFFICES (FACILITIES); REFRIGERATION MECHANICS; SOLAR RADIATION; TEMPERATURE

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 12P.

ISSUE: RIEOCT69

ABSTRACT: ENERGY BALANCE PROBLEMS IN THE DESIGN OF OFFICE BUILDINGS ARE ANALYZED. THROUGH THE USE OF INTEGRATED SYSTEMS UTILIZING DUAL PURPOSE PRODUCTS, A CONTROLLED ENVIRONMENT WITH MINIMUM EXPENDITURE OF ENERGY, EQUIPMENT AND SPACE CAN BE PROVIDED. CONTENTS INCLUDE--(1) OFFICE BUILDING OCCUPANCY LOADS, (2) OFFICE BUILDING HEATING LOAD ANALYSIS, (3) OFFICE BUILDING COOLING LOAD ANALYSIS, (4) ENERGY INTEGRATION OF LIGHTING, HEATING, AND COOLING SYSTEMS, (5) DESCRIPTION OF ALL-ELECTRIC TOTAL ENERGY SYSTEMS, (6) ACHIEVING HIGH TEMPERATURE COOLING, (7) SOLAR CALORIMETER TESTS, (8) USE OF SHADING COEFFICIENTS, AND (9) PERFORMANCE OF CURRENT INSTALLATIONS. A SUMMARY AND BIBLIOGRAPHY ARE ALSO INCLUDED. (AM)

AVAILABILITY: ASHRAE TRANSACTIONS, 345 E. 47TH ST., NEW YORK, N.Y.

JOURNAL CITATION: ASHRAE TRANSACTIONS; V70 P 335-346, 1964

ACCESSION NUMBER: ED030459

CLEARINGHOUSE ACCESSION NUMBER: LI001539

PUBLICATION DATE: NOV 66

TITLE: MECHANIZATION OF THE USAEC LIBRARY. I. LEGISLATIVE INFORMATION.

PERSONAL AUTHOR: LEBOWITZ, A.I.

INSTITUTION CODE: PGK04843

DESCRIPTOR: *AUTOMATION; COMPUTER PROGRAMS; *FEDERAL LEGISLATION; *GOVERNMENT PUBLICATIONS; INFORMATION PROCESSING; INFORMATION SYSTEMS; *LIBRARY TECHNICAL PROCESSES; *SPECIAL LIBRARIES; *ATOMIC ENERGY COMMISSION LIBRARY

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 33P.

ISSUE: RIENOV69

ABSTRACT: THIS REPORT DESCRIBES THE DEVELOPMENT OF A MECHANIZED FILE FOR LEGISLATIVE INFORMATION AT THE ATOMIC ENERGY COMMISSION (AEC) LIBRARY. THE TERM "LEGISLATION" IS TAKEN TO MEAN ALL GOVERNMENT DOCUMENTS ORIGINATED BY THE CONGRESS OR RELATED TO ITS WORK. TO DEFINE THE BASIC REQUIREMENTS FOR A MECHANIZED SYSTEM, A DETAILED STUDY OF THE EXISTING SYSTEM WAS FIRST MADE. THIS STUDY INVOLVED THE EVALUATION OF VARIOUS FUNCTIONS IN THE SYSTEM IN TERMS OF IMPORTANCE AND IN TERMS OF SUSCEPTIBILITY TO MECHANIZATION. IN THE REPORT THE OVERALL ORGANIZATION OF AEC AND THE LEGISLATIVE COLLECTION WITHIN AEC ARE BOTH DISCUSSED, ALONG WITH THE GENERAL REQUIREMENTS FOR A POTENTIAL MECHANIZED SYSTEM. THE DECISION MADE FOLLOWING THE EVALUATION WAS THAT A MECHANIZED SYSTEM SHOULD BE DESIGNED AND IMPLEMENTED. THE MEDIUM-SCALE MECHANIZED SYSTEM THAT WAS DEVELOPED PROCESSES DATA ABOUT THE LEGISLATION RECEIVED BY THE AEC LIBRARY AND PROVIDES FOUR CLASSES OF OUTPUT: CATALOGS, INDEXES, ANNOUNCEMENTS, AND LEGISLATIVE HISTORY. TWENTY COMPUTER PROGRAMS ARE REQUIRED TO OBTAIN THE DESIRED RESULTS. THE SYSTEM IS DESIGNED SO THAT ALMOST ALL FILES AND RECORDS ARE MAINTAINED ON MAGNETIC TAPE. THE SYSTEM HAS BEEN RUN ON THE COMPUTER ON A WEEKLY BASIS SINCE JAN. 8, 1965. (AUTHOR/RM)

AVAILABILITY: CLEARINGHOUSE FOR FEDERAL SCIENTIFIC AND TECHNICAL INFORMATION, SPRINGFIELD, VA. 22151 (TID-22643, MF-$0.65; HC-$3.00)

INSTITUTION NAME: ATOMIC ENERGY COMMISSION, WASHINGTON, D.C.

ACCESSION NUMBER: ED032230

CLEARINGHOUSE ACCESSION NUMBER: SE007512

PUBLICATION DATE: 67

TITLE: THE EFFECTIVENESS OF IME.

PERSONAL AUTHOR: MALLETTE, DAVID L.

DESCRIPTOR: *ACADEMIC ACHIEVEMENT; COURSE EVALUATION; *CURRICULUM DEVELOPMENT; *EVALUATION; *PHYSICAL SCIENCES; SCIENCE COURSE IMPROVEMENT PROJECT; *SECONDARY SCHOOL SCIENCE; INTERACTION OF MATTER AND ENERGY

EDRS PRICE: EDRS PRICE MF-$0.75 HC NOT AVAILABLE FROM EDRS. PLUS POSTAGE

DESCRIPTIVE NOTE: 77P.

ISSUE: RIEJAN70

ABSTRACT: THE ACHIEVEMENT OF CONTENT AND UNDERSTANDINGS OF THE SCIENTIFIC ENTERPRISE OF STUDENTS IN THE INTERACTION OF MATTER AND ENERGY PROGRAM (IME) AND CONVENTIONAL PHYSICAL SCIENCE CLASSES WAS COMPARED. THE EXPERIMENTAL GROUP CONSISTED OF 372 PUPILS FROM 13 CLASSES WHILE THE CONTROL GROUP HAD 275 STUDENTS FROM 12 CLASSES. STUDENTS WERE PRE- AND POST-TESTED WITH THE SEQUENTIAL TEST OF EDUCATIONAL PROGRESS (STEP) SCIENCE ACHIEVEMENT TEST AND THE TEST ON UNDERSTANDING SCIENCE (TOUS). "THE RESULTS INDICATE THAT THE IME IS SUCCESSFUL IN PROVIDING AN UNDERSTANDING OF SCIENCE PARTICULARLY IN THE AREA OF METHODS AND AIMS OF SCIENCE WITH PUPILS OF NORMAL OR ABOVE NORMAL MENTAL ABILITY WHEN TAUGHT BY TEACHERS WHO ARE ADEQUATELY TRAINED IN PHYSICAL SCIENCE." NOT AVAILABLE IN HARD COPY DUE TO MARGINAL LEGIBILITY OF ORIGINAL DOCUMENT. (BC)

ACCESSION NUMBER: ED038309

CLEARINGHOUSE ACCESSION NUMBER: SE008258

PUBLICATION DATE: SEP 69

TITLE: U.S. ATOMIC ENERGY COMMISSION 16 MM CLASSROOM FILMS ON NUCLEAR SCIENCE.

PERSONAL AUTHOR: AKERS, LAWRENCE K.; BRANNON, TRUY

INSTITUTION CODE: 88801044

SPONSORING AGENCY CODE: PGK04843

DESCRIPTOR: ATOMIC THEORY; *AUDIOVISUAL AIDS; BIOLOGY; CATALOGS; CHEMISTRY; *COLLEGE SCIENCE; *INSTRUCTIONAL FILMS; *NUCLEAR PHYSICS; *SECONDARY SCHOOL SCIENCE; ATOMIC ENERGY COMMISSION

EDRS PRICE: EDRS PRICE MF-$0.75 HC NOT AVAILABLE FROM EDRS. PLUS POSTAGE

DESCRIPTIVE NOTE: 46P.

ISSUE: RIEAUG70

ABSTRACT: FIFTY-SEVEN SELECTED 16MM FILMS ARE LISTED UNDER THE HEADINGS: GENERAL INTEREST FILMS, GENERAL SCIENCE FILMS, PHYSICS FILMS, CHEMISTRY FILMS, AND BIOLOGY FILMS. THE LISTING OF EACH FILM INCLUDES A BRIEF DESCRIPTION OF CONTENT

AND RECOMMENDED GRADE LEVELS. REFERENCES ARE GIVEN TO BOOKLETS IN THE ATOMIC ENERGY COMMISSION'S "UNDERSTANDING THE ATOM" SERIES SUITABLE FOR RELATED READING ASSIGNMENTS. INFORMATION IS GIVEN ON HOW TO BORROW FILMS. AN ALPHABETICAL LIST OF THE FILM TITLES AND A COMPLETE LIST OF "UNDERSTANDING THE ATOM" BOOKLETS ARE INCLUDED. (EB)

AVAILABILITY: AUDIO-VISUAL BRANCH, DIVISION OF PUBLIC INFORMATION, U.S. ATOMIC ENERGY COMMISSION, WASHINGTON, D.C. 20545 (FREE)

INSTITUTION NAME: OAK RIDGE ASSOCIATED UNIVERSITIES, TENN.

SPONSORING AGENCY NAME: ATOMIC ENERGY COMMISSION, WASHINGTON, D.C.

ACCESSION NUMBER: ED040866

CLEARINGHOUSE ACCESSION NUMBER: SE008927

PUBLICATION DATE: 66

TITLE: SOURCES OF INFORMATION ON ATOMIC ENERGY, INTERNATIONAL SERIES OF MONOGRAPHS IN LIBRARY AND INFORMATION SCIENCE, VOLUME 2.

PERSONAL AUTHOR: ANTHONY, L. J.

DESCRIPTORS: BIBLIOGRAPHIES; *ENERGY; INFORMATION SERVICES; *INFORMATION SOURCES; *INTERNATIONAL ORGANIZATIONS; *NUCLEAR PHYSICS; RADIATION EFFECTS; TECHNOLOGY

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 255P.

ISSUE: RIEMAY70

ABSTRACT: THIS BOOK PROVIDES A COMPREHENSIVE SURVEY OF THE PRINCIPAL NATIONAL AND INTERNATIONAL ORGANIZATIONS WHICH ARE SOURCES OF INFORMATION ON ATOMIC AND NUCLEAR ENERGY AND OF THE PUBLISHED LITERATURE IN THIS FIELD. ORGANIZATIONS IN ALL THE MAJOR NUCLEAR COUNTRIES SUCH AS THE UNITED STATES, BRITAIN, THE SOVIET UNION, FRANCE, AND JAPAN ARE DESCRIBED, AND FOR EACH, DETAILS ARE GIVEN OF STRUCTURE, RESEARCH PROGRAMS, INFORMATION SERVICES, LIBRARIES AND PRINCIPAL PUBLICATIONS. IN ADDITION, THE PUBLICLY AVAILABLE LITERATURE OF ATOMIC AND NUCLEAR ENERGY SUCH AS BOOKS, HANDBOOKS, ENCYCLOPEDIAS, CONFERENCE PROCEEDINGS, BIBLIOGRAPHIES, ABSTRACTING SERVICES, PERIODICALS AND TRANSLATIONS ARE DESCRIBED UNDER THE FOLLOWING HEADINGS: (1) ATOMIC ENERGY IN GENERAL, (2) NUCLEAR AND HIGH ENERGY PHYSICS, (3) NUCLEAR POWER AND ENGINEERING, (4) RADIATION AND RADIO-ISOTOPES, (5) PLASMA PHYSICS AND CONTROLLED NUCLEAR FUSION. THE BOOK IS INTENDED MAINLY FOR LIBRARIANS AND INFORMATION OFFICERS. THE TECHNICAL LEVEL IS THAT OF THE INTELLIGENT AND WELL-EDUCATED GENERAL USER OF REFERENCE SOURCES. THE INDEX HAS THREE SECTIONS: (1) AN INDEX TO ORGANIZATIONS, (2) AN AUTHOR INDEX, AND (3) AN INDEX TO PERIODICALS. (LC)

AVAILABILITY: PERGAMON PRESS, INC., 44-01 21ST STREET, LONG ISLAND CITY, NEW YORK 11101

ACCESSION NUMBER: ED041747

CLEARINGHOUSE ACCESSION NUMBER: SE009195

PUBLICATION DATE: 66

TITLE: ELECTRICITY AND MAGNETISM 1, ELECTROSTATICS.

PERSONAL AUTHOR: PHILLIPS, MELBA

INSTITUTION CODE: LVR17892

SPONSORING AGENCY CODE: FGK57295

DESCRIPTORS: *COLLEGE SCIENCE; *ELECTRICITY; ENERGY; FORCE; *INSTRUCTIONAL MATERIALS; MAGNETS; *PHYSICS; RESOURCE MATERIALS; UNDERGRADUATE STUDY

EDRS PRICE: EDRS PRICE MF-$0.75 HC-$1.85 PLUS POSTAGE

DESCRIPTIVE NOTE: 35P.; MONOGRAPH WRITTEN FOR THE CONFERENCE ON THE NEW INSTRUCTIONAL MATERIALS IN PHYSICS (UNIVERSITY OF WASHINGTON, SEATTLE, 1965)

ISSUE: RIEDEC70

ABSTRACT: THIS MONOGRAPH WAS WRITTEN FOR THE CONFERENCE ON THE NEW INSTRUCTIONAL MATERIALS IN PHYSICS, HELD AT THE UNIVERSITY OF WASHINGTON IN SUMMER, 1965. DESIGNED FOR COLLEGE STUDENTS WHO ARE NON-PHYSICS MAJORS, THE APPROACH IS PHENOMENOLOGICAL AND MACROSCOPIC. THERE ARE THREE SECTIONS ARRANGED IN ORDER OF INCREASING SOPHISTICATION. THE SECTIONS ARE (1) ELECTRIC FORCES AND FIELDS, (2) ELECTRIC ENERGY AND POTENTIAL, AND (3) ELECTRICAL PROPERTIES OF MATTER. A REVIEW OF THE HISTORICAL DEVELOPMENT OF THE CONCEPTS OF ELECTRIC FORCES AND FIELDS INTRODUCES THE FIRST SECTION. THE LAWS OF COULOMB AND GAUSS, AND THEIR APPLICATIONS ARE DISCUSSED. THE MAJOR CONCEPTS OF ELECTROSTATICS ARE PRESENTED IN SECTION 2. THE MONOGRAPH CONCLUDES WITH A DISCUSSION OF THE ELECTRICAL PROPERTIES OF MATERIAL MEDIA. EACH SECTION HAS A NUMBER OF DISCUSSION EXERCISES. THE AUTHOR SUGGESTS THAT DEMONSTRATIONS AND LABORATORY WORK SHOULD ACCOMPANY THE PRESENTATION OF THE MONOGRAPH MATERIAL. (LC)

INSTITUTION NAME: COMMISSION ON COLL. PHYSICS, COLLEGE PARK, MD.

SPONSORING AGENCY NAME: NATIONAL SCIENCE FOUNDATION, WASHINGTON, D.C.

ACCESSION NUMBER: ED042649

CLEARINGHOUSE ACCESSION NUMBER: SE009796

PUBLICATION DATE: JUN 68

TITLE: SOURCES OF NUCLEAR FUEL, UNDERSTANDING THE ATOM SERIES.

PERSONAL AUTHOR: SINGLETON, ARTHUR L., JR.

INSTITUTION CODE: XIE04840

DESCRIPTORS: ENERGY; *GEOLOGY; INDUSTRIAL TECHNOLOGY; INSTRUCTIONAL MATERIALS; *NATURAL RESOURCES; *NUCLEAR PHYSICS; *RADIATION; *RESOURCE MATERIALS

EDRS PRICE: EDRS PRICE MF-$0.75 HC NOT AVAILABLE FROM EDRS. PLUS POSTAGE

DESCRIPTIVE NOTE: 72P.

ISSUE: RIEJAN71

ABSTRACT: A BRIEF OUTLINE OF THE HISTORICAL LANDMARKS IN NUCLEAR PHYSICS LEADING TO THE USE OF NUCLEAR ENERGY FOR PEACEFUL PURPOSES INTRODUCES THIS ILLUSTRATED BOOKLET. THE DISTRIBUTION OF KNOWN SOURCES OF URANIUM ORES IS MAPPED AND SOME DETAILS ABOUT THE GEOLOGY OF EACH GEOGRAPHICAL AREA GIVEN. METHODS OF PROSPECTING, MINING, MILLING, REFINING, AND FUEL ELEMENT FABRICATION ARE DESCRIBED. METHODS OF RECOVERING WASTE AND PRINCIPLES OF WORKING SAFELY WITH URANIUM ARE OUTLINED. SOME PREDICTIONS ABOUT THE FUTURE OF NUCLEAR FUEL ARE INCLUDED. A GLOSSARY OF TERMS AND A SHORT REFERENCE AND FILM LIST ARE APPENDED. (AL)

AVAILABILITY: U. S. ATOMIC ENERGY COMMISSION, P. O. BOX 62, OAK RIDGE, TENNESSEE 37830 (FREE)

INSTITUTION NAME: ATOMIC ENERGY COMMISSION, OAK RIDGE, TENN. DIV. OF TECHNICAL INFORMATION.

ACCESSION NUMBER: ED050063

CLEARINGHOUSE ACCESSION NUMBER: SP007110

PUBLICATION DATE: 68

TITLE: RESOURCE HANDBOOK--MATTER AND ENERGY. A SUPPLEMENT TO BASIC CURRICULUM GUIDE--SCIENCE, GRADES K-6.

PERSONAL AUTHOR: STARR, JOHN W., JR., ED.

INSTITUTION CODE: JQB27840

DESCRIPTORS: *CURRICULUM GUIDES; ELEMENTARY SCHOOL CURRICULUM; *ELEMENTARY SCHOOL SCIENCE; *ENERGY; GRADE 1; GRADE 2; GRADE 3; GRADE 4; GRADE 5; GRADE 6; KINDERGARTEN; *MATTER; *SCIENCE EDUCATION; SCIENCE UNITS

EDRS PRICE: EDRS PRICE MF-$0.75 HC-$11.40 PLUS POSTAGE

DESCRIPTIVE NOTE: 237P.

ISSUE: RIEAUG71

ABSTRACT: GRADES OR AGES: GRADES K-6. SUBJECT MATTER: SCIENCE; MATTER AND ENERGY. ORGANIZATION AND PHYSICAL APPEARANCE: THE GUIDE IS DIVIDED INTO THE FOLLOWING SIX UNITS: 1) COMPOSITION OF MATTER, WITH 27 CONCEPTS; 2) LIGHT, WITH 20 CONCEPTS; 3) HEAT, WITH 14 CONCEPTS; 4) SOUND, WITH 12 CONCEPTS; 5) ELECTRICITY AND MAGNETISM, WITH 17 CONCEPTS; AND 6) FRICTION AND MACHINES, WITH 11 CONCEPTS. EACH UNIT IS SUBDIVIDED INTO INITIATORY ACTIVITIES, DEVELOPMENTAL ACTIVITIES, EVALUATION, VOCABULARY, CHILDREN'S BOOKS, AND FILMS. THE GUIDE IS MIMEOGRAPHED AND SPIRAL-BOUND WITH A SOFT COVER. OBJECTIVES AND ACTIVITIES: ACTIVITIES ARE GIVEN FOR EACH CONCEPT IN THE SIX UNITS. THE OBJECTIVES INVOLVE AN UNDERSTANDING OF THE CONCEPTS AND A CORRECT INTERPRETATION OF THE RESULTS OF THE EXPERIMENTS. INSTRUCTIONAL MATERIALS: THE MATERIALS NEEDED FOR EACH ACTIVITY ARE LISTED. THE BIBLIOGRAPHIES AND FILM LISTS INCLUDED IN EACH UNIT ARE ANNOTATED. STUDENT ASSESSMENT: SAMPLES OF EVALUATION ITEMS ARE INCLUDED IN EACH UNIT TO HELP THE TEACHER DEVELOP AN INFORMAL TESTING PROGRAM. (MBM)

INSTITUTION NAME: GARY CITY PUBLIC SCHOOL SYSTEM, IND.

ACCESSION NUMBER: ED052059

CLEARINGHOUSE ACCESSION NUMBER: SE012063

PUBLICATION DATE: APR 71

TITLE: REPORT TO THE PRESIDENT AND THE COUNCIL ON ENVIRONMENTAL QUALITY.

INSTITUTION CODE: BBB04463

DESCRIPTORS: *ADVISORY COMMITTEES; ENERGY; *ENVIRONMENT; LAND USE; POLLUTION; *QUALITY CONTROL; REPORTS; *SOCIAL RESPONSIBILITY

EDRS PRICE: EDRS PRICE MF-$0.75 HC-$3.15 PLUS POSTAGE

DESCRIPTIVE NOTE: 58P.

ISSUE: RIEOCT71

ABSTRACT: A SUMMARY OF THE FINDINGS AND RECOMMENDATIONS OF THE CITIZENS' ADVISORY COMMITTEE ON ENVIRONMENTAL QUALITY IS PRESENTED IN THIS REPORT. SPECIFIC ENVIRONMENTAL PROBLEMS WERE STUDIED IN DEPTH BY SIX SUBCOMMITTEES AND REPORTED UNDER THE FOLLOWING TOPICS: (1) PEOPLE AND LAND, (2) ENERGY PRODUCTION AND USE, (3) POLLUTION ABATEMENT, (4) ENVIRONMENTAL EDUCATION AND CITIZEN RESPONSIBILITY, AND (5) PRIORITIES AND FINANCING. APPENDED MATERIAL INCLUDES A BACKGROUND OF THE COMMITTEE AND DATA ON THE PUBLICATION OF A COMMITTEE GUIDE ENTITLED "COMMUNITY ACTION FOR ENVIRONMENTAL QUALITY." (BL)

INSTITUTION NAME: CITIZENS ADVISORY COMMITTEE ON ENVIRONMENTAL QUALITY.

ACCESSION NUMBER: ED052107

CLEARINGHOUSE ACCESSION NUMBER: SO001479

PUBLICATION DATE: 68

TITLE: A SURVEY COURSE: THE ENERGY AND MASS BUDGET AT THE

SURFACE OF THE EARTH.

INSTITUTION CODE: 08805071

SPONSORING AGENCY CODE: FGR57295

DESCRIPTOR: BIBLIOGRAPHIES; CLIMATIC FACTORS; EARTH SCIENCE; ECOLOGICAL FACTORS; *ECOLOGY; *ENVIRONMENTAL RESEARCH; GEOGRAPHIC REGIONS; GEOGRAPHY; HIGHER EDUCATION; INTERDISCIPLINARY APPROACH; LIBERAL ARTS; NATURAL SCIENCES; *PHYSICAL ENVIRONMENT; *PHYSICAL GEOGRAPHY; SOCIAL SCIENCES; *SYSTEMS ANALYSIS; UNITS OF STUDY (SUBJECT FIELDS); *BUDGET ACCOUNTING MODEL OF MASS AND ENERGY

EDRS PRICE: EDRS PRICE MF-$0.75 HC NOT AVAILABLE FROM EDRS. PLUS POSTAGE

DESCRIPTIVE NOTE: 141P.

ISSUE: RIEOCT71

ABSTRACT: THE OBJECTIVES OF THIS GEOGRAPHY COURSE FOR LIBERAL ARTS STUDENTS (INCLUDE THE FOLLOWING: 1) TO DEMONSTRATE COOPERATIVE ACTION AMONG SCIENCES, BY SHOWING THAT PHYSICAL AND CHEMICAL PHENOMENA OCCUR AT BIOLOGICAL SURFACES THAT USUALLY EXIST IN ECONOMIC AND CULTURAL FRAMEWORKS; 2) TO SHOW THAT LABORATORY PRINCIPLES OF MASS AND ENERGY EXCHANGE AND TRANSFORMATION CAN BE USED IN UNDERSTANDING URBAN, RURAL, AND WILDLAND PARTS OF THE EARTH'S SURFACE; AND, 3) TO LEAD THE STUDENT TO EXAMINE HIS IDEAS ABOUT ENVIRONMENT AND THE EARTH USING THE BUDGET ACCOUNTING MODEL OF RELATIONSHIPS WHICH HELP DESCRIBE REGULARITIES IN REGIONAL LANDSCAPES AND ECONOMICS, AND AID IN EXAMINING MAN'S ROLE IN CHANGING THE CONDITIONS THAT AFFECT THE PROCESSES FORMING LANDSCAPE FEATURES. THE FLEXIBLE SEQUENCE OF TEACHING UNITS EXAMINES THE SIMPLER INDIVIDUAL BUDGETS FIRST: 1) WIND, ONE WEEK; 2) ATMOSPHERIC COMPOSITION AND POLLUTION, ONE WEEK; 3) ENERGY EXCHANGES IN ECOLOGIC AND ECONOMIC SYSTEMS, RADIATIVE ENERGY, AND HEAT, TWO WEEKS; 4) WATER EXCHANGES AT THE EARTH'S SURFACE, TWO WEEKS. THE INTERACTING, COMPLEX COMBINATION OF THESE BUDGETS ARE EXAMINED IN THE LAST FOUR SYNTHESIZING UNITS: 5) ORGANISMS, ONE WEEK; 6) ECOSYSTEMS OR ELEMENTS OF THE LANDSCAPE, TWO OR THREE WEEKS; 7) MOSAIC LANDSCAPES, ONE WEEK, AND; 8) REGIONS AND THEIR WORLD PATTERN, TWO OR THREE WEEKS. THE OBJECTIVES SUGGESTED OUTLINE OF TOPICS, RELATION TO OTHER UNITS, EXTENSIVE USEFUL REFERENCES, AND CASE STUDIES ARE CITED FOR EACH UNIT. (AUTHOR/SBE)

REPORT NUMBER: PUB-7

AVAILABILITY: COMMISSION ON COLLEGE GEOGRAPHY, ARIZONA STATE UNIVERSITY; TEMPE, ARIZONA 85281 (PAPERBACK, $1.00)

INSTITUTION NAME: ASSOCIATION OF AMERICAN GEOGRAPHERS, WASHINGTON, D.C. COMMISSION ON COLLEGE GEOGRAPHY.

SPONSORING AGENCY NAME: NATIONAL SCIENCE FOUNDATION, WASHINGTON, D.C.

ACCESSION NUMBER: ED054973

CLEARINGHOUSE ACCESSION NUMBER: SE012080

PUBLICATION DATE: FEB 69

TITLE: FALLOUT FROM NUCLEAR TESTS.

PERSONAL AUTHOR: LOMAX, C. L.

INSTITUTION CODE: XIE04840

DESCRIPTOR: *BIOLOGY; *GENETICS; *NUCLEAR PHYSICS; PAMPHLETS; *POLLUTION; *RADIATION; SUPPLEMENTARY READING MATERIALS; ATOMIC ENERGY COMMISSION

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 44P.

ISSUE: RIENOV71

ABSTRACT: THIS BOOKLET, IN THE SERIES *UNDERSTANDING THE ATOM,* SUMMARIZES THE IMPORTANT FINDINGS ON RADIOACTIVE FALLOUT FOR WHICH THERE IS SUBSTANTIAL SCIENTIFIC AGREEMENT, INDICATES THE AREAS OF DISAGREEMENT, AND LISTS SOME ANSWERED QUESTIONS. SOURCES OF FALLOUT, ITS LOCAL AND WORLDWIDE EFFECTS (INCLUDING MOVEMENT IN THE ATMOSPHERE), THE BIOLOGICAL EFFECTS (GENETIC AND SOMATIC THRESHOLD AND NONTHRESHOLD RESPONSES), AND THE BIOLOGICAL PATHWAYS TO MAN ARE DISCUSSED IN GENERAL TERMS, AND IN MORE DETAIL FOR THE FOLLOWING RADIONUCLIDES: IODINE-131; STRONTIUM-90; AND CARBON-14. PREVENTIVE AND REMEDIAL MEASURES ARE BRIEFLY CONSIDERED. A LIST OF SUGGESTED REFERENCES IS APPENDED. (AL)

AVAILABILITY: USAEC, P. O. BOX 62, OAK RIDGE, TENNESSEE 37830 (FREE)

INSTITUTION NAME: ATOMIC ENERGY COMMISSION, OAK RIDGE, TENN. DIV. OF TECHNICAL INFORMATION.

ACCESSION NUMBER: ED054966

CLEARINGHOUSE ACCESSION NUMBER: SE012470

PUBLICATION DATE: 71

TITLE: NUCLEAR REACTORS FOR SPACE POWER, UNDERSTANDING THE ATOM SERIES.

PERSONAL AUTHOR: CORLISS, WILLIAM R.

INSTITUTION CODE: XIE04840

DESCRIPTOR: *AEROSPACE TECHNOLOGY; COLLEGE SCIENCE; INSTRUCTIONAL MATERIALS; *NUCLEAR PHYSICS; PHYSICS; RESOURCE MATERIALS; SECONDARY SCHOOL SCIENCE; ATOMIC ENERGY COMMISSION

EDRS PRICE: EDRS PRICE MF-$0.75 HC-$3.15 PLUS POSTAGE

DESCRIPTIVE NOTE: 52P.; REVISED

ISSUE: RIEJAN72

ABSTRACT: THE HISTORICAL DEVELOPMENT OF ROCKETRY AND NUCLEAR TECHNOLOGY INCLUDES A SPECIFIC DESCRIPTION OF SYSTEMS FOR NUCLEAR AUXILIARY POWER (SNAP) PROGRAMS. SOLAR CELLS AND FUEL CELLS ARE CONSIDERED AS ALTERNATIVE POWER SUPPLIES FOR SPACE USE. CONSTRUCTION AND OPERATION OF SPACE POWER PLANTS MUST INCLUDE CONSIDERATIONS OF THE TRANSFER OF HEAT ENERGY TO ELECTRICITY AND OF WASTE HEAT DISSIPATION. THE SHIELDING OF SUCH PLANTS IS IMPORTANT, FROM BOTH EFFICIENCY AND SAFETY STANDPOINTS. THE SAFETY OF NUCLEAR MATERIAL HANDLING IN SPACE FLIGHT IS ESPECIALLY CRUCIAL. VARIOUS IMPROVEMENTS ARE PROPOSED CONCERNING PRESENT POWER PLANTS. LISTS OF RELEVANT READING TOPICS AND OF MOTION PICTURES ARE INCLUDED. (TS)

AVAILABILITY: USAEC, P. O. BOX 62, OAK RIDGE, TENNESSEE 37830 (FREE)

INSTITUTION NAME: ATOMIC ENERGY COMMISSION, OAK RIDGE, TENN. DIV. OF TECHNICAL INFORMATION.

ACCESSION NUMBER: ED054967

CLEARINGHOUSE ACCESSION NUMBER: SE012471

PUBLICATION DATE: 71

TITLE: NUCLEAR PROPULSION FOR SPACE, UNDERSTANDING THE ATOM SERIES.

PERSONAL AUTHOR: CORLISS, WILLIAM R.; SCHWENK, FRANCIS C.

INSTITUTION CODE: XIE04840

DESCRIPTOR: *AEROSPACE TECHNOLOGY; COLLEGE SCIENCE; *INSTRUCTIONAL MATERIALS; *NUCLEAR PHYSICS; PHYSICS; *RESOURCE MATERIALS; SECONDARY SCHOOL SCIENCE; ATOMIC ENERGY COMMISSION

EDRS PRICE: EDRS PRICE MF-$0.75 HC-$3.15 PLUS POSTAGE

DESCRIPTIVE NOTE: 64P.; REVISED

ISSUE: RIEJAN72

ABSTRACT: THE OPERATION OF NUCLEAR ROCKETS WITH RESPECT BOTH TO ROCKET THEORY AND TO VARIOUS FUELS IS DESCRIBED. THE DEVELOPMENT OF NUCLEAR REACTORS FOR USE IN NUCLEAR ROCKET SYSTEMS IS PROVIDED, WITH THE KIWI AND NERVA PROGRAMS HIGHLIGHTED. THE THEORY OF FUEL ELEMENT AND REACTOR CONSTRUCTION AND OPERATION IS EXPLAINED WITH PARTICULAR REFERENCE TO ROCKET APPLICATIONS. TESTING SITES AND PROGRAMS ARE ILLUSTRATED. FUTURE DEVELOPMENTS AND APPLICATIONS ARE DISCUSSED. THE CONCLUSION THAT THE NERVA ENGINE IS THE ONLY PRACTICAL ADVANCED PROPULSION SYSTEM THAT CAN MEET THE REQUIREMENTS OF THE SPACE TRANSPORTATION SYSTEM IN THE 1980'S AND BEYOND IS STATED. A GLOSSARY, READING LIST, AND MOTION PICTURE LIST OF RELATED TOPICS ARE INCLUDED. (TS)

AVAILABILITY: USAEC, P. O. BOX 62, OAK RIDGE, TENNESSEE 37830 (FREE)

INSTITUTION NAME: ATOMIC ENERGY COMMISSION, OAK RIDGE, TENN. DIV. OF TECHNICAL INFORMATION.

ACCESSION NUMBER: ED054968

CLEARINGHOUSE ACCESSION NUMBER: SE012472

PUBLICATION DATE: 71

TITLE: POWER FROM RADIOISOTOPES, UNDERSTANDING THE ATOM SERIES.

PERSONAL AUTHOR: CORLISS, WILLIAM R.; MEAD, ROBERT L.

INSTITUTION CODE: XIE04840

DESCRIPTOR: COLLEGE SCIENCE; *ENERGY; INSTRUCTIONAL MATERIALS; *NUCLEAR PHYSICS; PHYSICS; *RADIOISOTOPES; *RESOURCE MATERIALS; SECONDARY SCHOOL SCIENCE; ATOMIC ENERGY COMMISSION

EDRS PRICE: EDRS PRICE MF-$0.75 HC-$3.15 PLUS POSTAGE

DESCRIPTIVE NOTE: 63P.; REVISED

ISSUE: RIEJAN72

ABSTRACT: THIS 1971 REVISION DEALS WITH RADIOISOTOPES AND THEIR USE IN POWER GENERATORS. EARLY DEVELOPMENTS AND APPLICATIONS FOR THE SYSTEMS FOR NUCLEAR AUXILIARY POWER (SNAP) AND RADIOISOTOPE THERMOELECTRIC GENERATORS (RTGS) ARE REVIEWED. PRESENT USES IN SPACE AND ON EARTH ARE INCLUDED. USES IN SPACE ARE AS POWER SOURCES IN VARIOUS SATELLITES AND SPACE PROBES. SOME PROJECTIONS AS TO FUTURE SPACE OBJECTIVES ARE MADE. THE SAFETY FACTORS INVOLVED WITH NUCLEAR MATERIALS IN SPACE FLIGHT ARE CONSIDERED, PARTICULARLY WITH REGARD TO FLIGHT FAILURES. THE USES OF RADIOISOTOPE GENERATORS ON EARTH ARE LARGELY IN THE AREA OF REMOTE WEATHER OR COMMUNICATION STATIONS, AS IN THE POLAR REGIONS, AT SEA, OR UNDER THE SEA. THE CHOICE OF RADIOISOTOPE FUELS AND THE CONSTRUCTION OF A TYPICAL GENERATOR ARE ILLUSTRATED ALONG WITH SOME THEORETICAL CONSIDERATIONS OF HEAT TRANSFER AND ENERGY CONVERTERS. LISTS OF RELEVANT READING TOPICS AND OF MOTION PICTURES ARE INCLUDED. (TS)

AVAILABILITY: USAEC, P. O. BOX 62, OAK RIDGE, TENNESSEE 37830 (FREE)

INSTITUTION NAME: ATOMIC ENERGY COMMISSION, OAK RIDGE, TENN. DIV. OF TECHNICAL INFORMATION.

ACCESSION NUMBER: ED054969

CLEARINGHOUSE ACCESSION NUMBER: SE012473

PUBLICATION DATE: 71

TITLE: BREEDER REACTORS, UNDERSTANDING THE ATOM SERIES.

PERSONAL AUTHOR: MITCHELL, WALTER, III; TURNER, STANLEY E.

INSTITUTION CODE: X1E04840

DESCRIPTOR: COLLEGE SCIENCE; *ENERGY; INSTRUCTIONAL MATERIALS; *NUCLEAR PHYSICS; PHYSICS; *RESOURCE MATERIALS; SECONDARY SCHOOL SCIENCE; ATOMIC ENERGY COMMISSION

EDRS PRICE: EDRS PRICE MF-$0.75 HC-$3.15 PLUS POSTAGE

DESCRIPTIVE NOTE: 53P.

ISSUE: R1EJAN72

ABSTRACT: THE THEORY OF BREEDER REACTORS IN RELATIONSHIP TO A DISCUSSION OF FISSION IS PRESENTED. DIFFERENT KINDS OF REACTORS ARE CHARACTERIZED BY THE COOLING FLUIDS USED, SUCH AS LIQUID METAL, GAS, AND MOLTEN SALT. THE HISTORICAL DEVELOPMENT OF BREEDER REACTORS OVER THE PAST TWENTY-FIVE YEARS INCLUDES SPECIFIC EXAMPLES OF REACTORS. THE LOCATION AND A BRIEF DESCRIPTION OF VARIOUS REACTORS AND PROGRAMS IN THE UNITED STATES AND FOREIGN COUNTRIES INDICATES A LARGE EXPANSION OF SUCH FACILITIES IN THE NEAR FUTURE. LISTS OF RELEVANT READING TOPICS AND OF MOTION PICTURES ARE INCLUDED. (TS)

AVAILABILITY: USAEC, P. O. BOX 62, OAK RIDGE, TENNESSEE 37830 (FREE)

INSTITUTION NAME: ATOMIC ENERGY COMMISSION, OAK RIDGE, TENN. DIV. OF TECHNICAL INFORMATION.

ACCESSION NUMBER: ED055810

CLEARINGHOUSE ACCESSION NUMBER: SE012084

PUBLICATION DATE: 70

TITLE: ATOMIC ENERGY BASICS, UNDERSTANDING THE ATOM SERIES.

INSTITUTION CODE: X1E04840

DESCRIPTOR: *ATOMIC THEORY; CHEMISTRY; ENERGY; INSTRUCTIONAL MATERIALS; *NUCLEAR PHYSICS; PHYSICS; *RADIOISOTOPES; RESOURCE MATERIALS; SECONDARY SCHOOL SCIENCE

EDRS PRICE: EDRS PRICE MF-$0.75 HC-$4.20 PLUS POSTAGE

DESCRIPTIVE NOTE: 96P.

ISSUE: R1EFEB72

ABSTRACT: THIS BOOKLET IS PART OF THE "UNDERSTANDING THE ATOM SERIES," THOUGH IT IS A LATER EDITION AND NOT INCLUDED IN THE ORIGINAL SET OF 51 BOOKLETS. A BASIC SURVEY OF THE PRINCIPLES OF NUCLEAR ENERGY AND MOST IMPORTANT APPLICATIONS ARE PROVIDED. THESE MAJOR TOPICS ARE EXAMINED: MATTER HAS MOLECULES AND ATOMS, THE ATOM HAS ELECTRONS, THE NUCLEUS, VISUALIZING THE ATOM, THE CHEMICAL ELEMENTS, ENERGY COMPARISONS, NUCLEAR RADIATIONS AND THEIR PENETRATION OF MATERIALS, NUCLEAR ENERGY RELEASED, NUCLEAR REACTORS, AND SERVICE TO MAN. NUMEROUS PHOTOGRAPHS AND DIAGRAMS ARE UTILIZED. (PR)

AVAILABILITY: USAEC, P. O. BOX 62, OAK RIDGE, TENNESSEE 37830 (FREE)

INSTITUTION NAME: ATOMIC ENERGY COMMISSION, OAK RIDGE, TENN. DIV. OF TECHNICAL INFORMATION.

ACCESSION NUMBER: ED055814

CLEARINGHOUSE ACCESSION NUMBER: SE012110

PUBLICATION DATE: MAY 67

TITLE: NUCLEAR ENERGY FOR WATER DESALTING, A BIBLIOGRAPHY.

PERSONAL AUTHOR: KUHNS, HELEN F., COMP.; AND OTHERS

INSTITUTION CODE: X1E04840

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; *ENERGY; LITERATURE REVIEWS; NATURAL RESOURCES; *NUCLEAR PHYSICS; TECHNOLOGICAL ADVANCEMENT; *WATER RESOURCES; *WATER DESALTING

EDRS PRICE: EDRS PRICE MF-$0.75 HC-$1.85 PLUS POSTAGE

DESCRIPTIVE NOTE: 34P.

ISSUE: R1EFEB72

ABSTRACT: THIS BIBLIOGRAPHY INCLUDES 215 ABSTRACTS OF PUBLICATIONS ON THE USE OF NUCLEAR ENERGY IN THE PRODUCTION OF POTABLE WATER FROM SALINE OR BRACKISH WATERS. THE USES OF NUCLEAR REACTORS, RADIOISOTOPIC HEAT SOURCES, AND NUCLEAR EXPLOSIVES ARE COVERED IN RELATION TO THE VARIOUS DESALINATION METHODS AVAILABLE. LITERATURE THROUGH APRIL 1967 HAS BEEN SEARCHED FOR THE PRESENT EDITION. REFERENCES TO THE TECHNICAL REPORT LITERATURE ARE ARRANGED BY REPORT NUMBER UNDER THE ISSUING ORGANIZATIONS, AND THE JOURNAL REFERENCES ARE ARRANGED ALPHABETICALLY BY JOURNAL TITLE. AUTHOR AND REPORT NUMBER-AVAILABILITY INDEXES ARE INCLUDED. (AUTHOR/PR)

AVAILABILITY: CLEARINGHOUSE FOR FEDERAL SCIENTIFIC AND TECHNICAL INFORMATION, NATIONAL BUREAU OF STANDARDS, DEPARTMENT OF COMMERCE, SPRINGFIELD, VIRGINIA 22151

INSTITUTION NAME: ATOMIC ENERGY COMMISSION, OAK RIDGE, TENN. DIV. OF TECHNICAL INFORMATION.

ACCESSION NUMBER: ED056860

CLEARINGHOUSE ACCESSION NUMBER: SE012116

PUBLICATION DATE: JUN 71

TITLE: ENERGY SOURCES, TEACHER'S GUIDE.

PERSONAL AUTHOR: KARPLUS, ROBERT

INSTITUTION CODE: CIU11450

DESCRIPTOR: CONCEPTUAL SCHEMES; *ELEMENTARY SCHOOL SCIENCE; *ENERGY; EXPERIMENTS; HEAT; MOTION; *SCIENCE ACTIVITIES; SCIENTIFIC CONCEPTS; *TEACHING GUIDES; *SCIENCE CURRICULUM IMPROVEMENT STUDY

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 127P.

ISSUE: R1EMAR72

ABSTRACT: THE UNIT PRESENTED IN THIS TEACHER'S GUIDE IS THE FIRST OF TWO DEVELOPED FOR THE FIFTH YEAR IN THE SCIENCE CURRICULUM IMPROVEMENT STUDY (SCIS) CURRICULUM. ATTENTION IS FOCUSED ON ENERGY TRANSFERS INVOLVED IN THE INTERACTION OF MATTER IN SOLID, LIQUID, AND GASEOUS FORMS. THE CHAPTERS ARE PRESENTED IN SIX PARTS WHICH INCLUDE ACTIVITIES FOR REVIEWING EXPERIMENTAL PROCEDURE, IDENTIFYING ENERGY TRANSFER, INVESTIGATING ENERGY TRANSFER AS BY TEMPERATURE CHANGE AND MOTION, INVESTIGATING ENERGY TRANSFER DURING MELTING AND DISSOLVING, AND TWO PROJECTS. EACH CHAPTER PROVIDES THE TEACHER WITH A SECTION ON ADVANCE PREPARATION, TEACHING SUGGESTIONS, AND OPTIONAL ACTIVITIES. THE DESIGN AND USE OF THE EQUIPMENT KIT ARE DESCRIBED. (PR)

AVAILABILITY: RAND MCNALLY & COMPANY, P. O. BOX 7600, CHICAGO, ILLINOIS 60680

INSTITUTION NAME: CALIFORNIA UNIV., BERKELEY. SCIENCE CURRICULUM IMPROVEMENT STUDY.

ACCESSION NUMBER: ED059101

CLEARINGHOUSE ACCESSION NUMBER: SE013342

PUBLICATION DATE: 71

TITLE: ENERGY, A CRISIS IN POWER.

PERSONAL AUTHOR: HOLDREN, JOHN; HERRERA, PHILIP

DESCRIPTOR: CASE STUDIES; *CITIZEN PARTICIPATION; *CONFLICT; *ELECTRICITY; *ENERGY; ENVIRONMENTAL INFLUENCES; FUEL CONSUMPTION; *POLLUTION; THERMAL ENVIRONMENT

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 255P.; A SIERRA CLUB BATTLEBOOK

ISSUE: R1EMAY72

ABSTRACT: THE DEMAND OF AMERICANS FOR MORE AND MORE POWER, PARTICULARLY ELECTRIC POWER, CONTRASTED BY THE DEEP AND GROWING CONCERN FOR THE ENVIRONMENT AND A DESIRE BY PRIVATE CITIZENS TO PARTICIPATE IN THE PUBLIC DECISIONS THAT AFFECT THE ENVIRONMENT IS THE DILEMMA EXPLORED IN THIS BOOK. PART ONE BY JOHN HOLDREN, OFFERS A SCIENTIST'S OVERVIEW OF THE ENERGY CRISIS, EXAMINING THE SOURCES AND CONSUMPTION OF ENERGY IN THE UNITED STATES. HE CONSIDERS FOSSIL FUELS, HYDROELECTRIC ENERGY, NUCLEAR FISSION, ENERGY USE, THERMAL POLLUTION, CLIMATE, TOMORROW'S ENERGY SUPPLY, AND SOME ASPECTS OF THE DEMAND, DESCRIBING HOW PRODUCTION OF POWER INEVITABLY LEAVES ITS MARK UPON THE ENVIRONMENT. PART TWO BY PHILIP HERRERA, REPORTS A JOURNALIST'S ACCOUNT OF REMARKABLE EFFORTS BY CONCERNED CITIZENS TO PROTECT THE ENVIRONMENT FROM THE EFFECTS OF POWER-ACTIVATED AIR, WATER, AND LANDSCAPE POLLUTION. CASE STUDIES OF SOME OF THE MAJOR RECENT CONTROVERSIES OVER THE PLACEMENT AND OPERATION OF POWER PLANTS ARE GIVEN, SUMMARIZING THEIR CONFLICTS AND RESOLUTIONS. TOGETHER, THE AUTHOR'S OBSERVATIONS AND RECOMMENDATIONS RAISE HOPE THAT THE UNITED STATES CAN FIND A RATIONAL SOLUTION TO ITS ENERGY CRISIS. (BL)

AVAILABILITY: SIERRA CLUB, 1050 MILLS TOWER, SAN FRANCISCO, CALIFORNIA 94104 ($2.75)

ACCESSION NUMBER: ED059896

CLEARINGHOUSE ACCESSION NUMBER: SE013384

PUBLICATION DATE: 71

TITLE: A BIBLIOGRAPHY OF BASIC BOOKS ON ATOMIC ENERGY, A WORLD OF THE ATOM SERIES BOOKLET.

INSTITUTION CODE: FGK04843

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; *BIBLIOGRAPHIES; *BOOKLISTS; ELEMENTARY SCHOOL SCIENCE; *NUCLEAR PHYSICS; *PHYSICS; RESOURCE MATERIALS; SECONDARY SCHOOL SCIENCE; ATOMIC ENERGY COMMISSION

EDRS PRICE: EDRS PRICE MF-$0.75 HC-$3.15 PLUS POSTAGE

DESCRIPTIVE NOTE: 64P.

ISSUE: R1EJUN72

ABSTRACT: THIS BOOKLET IN THE "WORLD OF THE ATOM" SERIES REPLACES THE EARLIER BOOKS ON ATOMIC ENERGY FOR ADULTS AND CHILDREN. IT INCLUDES ANNOTATED BIBLIOGRAPHIES FOR CHILDREN (GRADE LEVEL INDICATED) AND ADULTS. OVER 60 BOOKS ARE CLASSED AS ELEMENTARY AND OVER 70 AS ADVANCED. THESE ARE ALPHABETIZED BY TITLE AND ALSO INDEXED BY AUTHOR. A LIST OF PUBLISHER ADDRESSES IS INCLUDED ALONG WITH A BRIEF INTRODUCTION TO LIBRARY USAGE. THE BOOKLET IS ILLUSTRATED WITH PHOTOGRAPHS OF NUCLEAR PHYSICISTS, RESEARCH INSTALLATIONS AND SOME APPLICATIONS OF NUCLEAR POWER. (TS)

AVAILABILITY: USAEC TECHNICAL INFORMATION CENTER, P.O. BOX 62, OAK RIDGE, TENNESSEE 37830 (FREE)

INSTITUTION NAME: ATOMIC ENERGY COMMISSION, WASHINGTON, D.C.

ACCESSION NUMBER: ED061083

CLEARINGHOUSE ACCESSION NUMBER: SE013516

PUBLICATION DATE: NOV 71

TITLE: UNIT: ENERGY AND CHANGE, INSPECTION SET, FIRST TRIAL

MATERIALS.

INSTITUTION CODE: BBB05339

DESCRIPTOR: CURRICULUM; *ENERGY; *INSTRUCTION; LABORATORY MANUALS; PHYSICAL SCIENCES; *SCIENCE ACTIVITIES; SECONDARY SCHOOL SCIENCE; TEACHING GUIDES; *UNITS OF STUDY (SUBJECT FIELDS); AUSTRALIAN SCIENCE EDUCATION PROJECT

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 230P.

ISSUE: RIEJUL72

ABSTRACT: THE FIRST TRIAL VERSION OF A UNIT OF THE AUSTRALIAN SCIENCE EDUCATION PROJECT MATERIALS FOR GRADES SEVEN THROUGH TEN IN AUSTRALIAN SECONDARY SCHOOLS IS INTENDED FOR STUDENTS IN THE CONCRETE OPERATIONS STAGE OF INTELLECTUAL DEVELOPMENT. IT PROVIDES ACTIVITIES TO GIVE STUDENTS A BROAD INTRODUCTION TO THE CONCEPT OF ENERGY, WHICH IS TREATED AS A MODEL THAT SCIENTISTS FIND USEFUL TO EXPLAIN CHANGE. THE TEACHER'S GUIDE TO THE UNIT IS AN ANNOTATED COPY OF THE STUDENT MANUAL, GIVING IDEAS FOR ASSISTING STUDENTS TO DEVELOP THE CONCEPT, LISTS OF APPARATUS REQUIRED, AND SUGGESTED REFERENCES FOR STUDENTS AND TEACHERS. ALL STUDENTS ARE EXPECTED TO COMPLETE THE INTRODUCTORY UNIT, AND THEN TO CHOOSE ONE OR MORE OF THE FIVE OPTIONS: "STORED ENERGY," "ENERGY AND LIFE," "ENERGY CONVERTERS," "COMBUSTION," AND "USING THE ENERGY IN FUELS." EACH OPTION CONTAINS INSTRUCTIONS FOR NUMEROUS ACTIVITIES, POSES QUESTIONS TO BE ANSWERED IN THE STUDENT WORKBOOK, AND PROVIDES BACKGROUND INFORMATION. A DIAGNOSTIC TEST BOOKLET, AND A BOOKLET PROVIDING THE CORRECT ANSWER, WITH A DISCUSSION OF THE INCORRECT CHOICES, IS ALSO INCLUDED IN THE PACKAGE. (AL)

AVAILABILITY: ERIC/SMEAC, 1460 WEST LANE AVENUE, COLUMBUS, OHIO 43221 (ON LOAN)

INSTITUTION NAME: AUSTRALIAN SCIENCE EDUCATION PROJECT, HOORAR, VICTORIA.

ACCESSION NUMBER: ED064094

CLEARINGHOUSE ACCESSION NUMBER: SE013703

PUBLICATION DATE: 70

TITLE: HEAT, ENERGY, AND ORDER, PART TWO OF AN INTEGRATED SCIENCE SEQUENCE, STUDENT GUIDE, 1970 EDITION.

INSTITUTION CODE: BBB06337

SPONSORING AGENCY CODE: FGK57295

DESCRIPTOR: CONCEPTUAL SCHEMES; *ENERGY; INSTRUCTIONAL MATERIALS; *INTEGRATED CURRICULUM; INTERDISCIPLINARY APPROACH; SCIENCE ACTIVITIES; *SECONDARY SCHOOL SCIENCE; UNIFIED STUDIES PROGRAMS; *PORTLAND PROJECT

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 157P.

ISSUE: RIEOCT72

ABSTRACT: PART TWO OF THE FIRST YEAR IN THE PORTLAND PROJECT, A THREE-YEAR HIGH SCHOOL INTEGRATED SCIENCE CURRICULUM, IS CONTAINED IN THIS STUDENT GUIDE. THIS VOLUME, ONE OF FOUR PARTS IN THE YEAR COURSE, INVOLVES ACTIVITIES RELATING TO WHAT IS CONSIDERED THE MOST POWERFUL UNIFYING CONCEPT IN SCIENCE: ENERGY. THE MACROSCOPIC ASPECTS OF HEAT AS EMBODIED IN CALORIMETRY ARE RELATED TO THE MICROSCOPIC IN TERMS OF RANDOM MOLECULAR MOTION. THIS HELPS TO DEVELOP THE CONCEPT OF THE ATOMIC NATURE OF MATTER, WHICH IS ESSENTIAL TO MUCH OF THE UNIT. VARIOUS ENERGY CONVERSIONS FORM THE VEHICLE FOR EXTENDING AND GENERALIZING THE ENERGY CONCEPT. NUCLEAR ENERGY IS EXPLORED, AND, FINALLY, THE THERMODYNAMIC LIMITATIONS AND IMPLICATIONS OF ENERGY CONVERSION ARE CONSIDERED. ABOUT HALF OF THE RIGHT-HAND SIDE OF MOST PAGES IN THE VOLUME IS BLANK FOR THE PURPOSE OF RECORDING OBSERVATIONS AND OTHER NOTES. (FOR ADDITIONAL INFORMATION ABOUT THE PROJECT, SEE SE 013 702, SE 013 704, SE 013 705, AND SE 013 706.) (AUTHOR/PR)

AVAILABILITY: ERIC/SMEAC, 1460 WEST LANE AVENUE, COLUMBUS, OHIO 43221 (ON LOAN)

INSTITUTION NAME: PORTLAND PROJECT COMMITTEE, OREG.

SPONSORING AGENCY NAME: NATIONAL SCIENCE FOUNDATION, WASHINGTON, D.C.

ACCESSION NUMBER: ED064139

CLEARINGHOUSE ACCESSION NUMBER: SE013885

PUBLICATION DATE: 72

TITLE: MAN AND THE ENVIRONMENT. A BIBLIOGRAPHY OF SELECTED PUBLICATIONS OF THE UNITED NATIONS SYSTEM 1946-1971.

PERSONAL AUTHOR: WINTON, HARRY N. M., COMP.

DESCRIPTOR: AGRICULTURE; *ANNOTATED BIBLIOGRAPHIES; ENERGY; *ENVIRONMENTAL INFLUENCES; *FOOD; METEOROLOGY; NATURAL RESOURCES; *POLLUTION; *POPULATION TRENDS; PUBLIC HEALTH

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 305P.

ISSUE: RIEOCT72

ABSTRACT: PUBLICATION OF THE INTERNATIONAL AGENCIES OF THE UNITED NATIONS SYSTEM, THRU 1971, THAT REFER TO MAN, WORLD NATURAL RESOURCES, THE ENVIRONMENT AND POPULATION TRENDS ARE ARRANGED ACCORDING TO SUBJECT MATTER. WITHIN MOST CATEGORIES, ENTRIES ARE ARRANGED BY GEOGRAPHICAL AREA. DESCRIPTIVE ANNOTATIONS ARE PROVIDED FOR EACH OF THE MORE THAN 1,000 ENTRIES. OBSOLETE MATERIAL HAS BEEN EXCLUDED, BUT SOME OUT-OF-PRINT TITLES LIKELY TO BE AVAILABLE IN LIBRARIES ARE LISTED. PUBLICATION DATA, INCLUDING AVAILABILITY OF MULTI-LINGUAL EDITIONS, PRICE, AND, WHERE APPROPRIATE, ORDERING NUMBER, ARE PROVIDED FOR ALL BOOKS, REPORTS, AND JOURNAL CITATIONS FOR ARTICLES. AUTHOR, SERIES AND SERIALS, TITLE AND SUBJECT INDICES ARE APPENDED. (LR)

AVAILABILITY: R. R. BOWKER COMPANY, P. O. BOX 1807, ANN ARBOR, MICHIGAN 48106 ($12.50)

ACCESSION NUMBER: ED064140

CLEARINGHOUSE ACCESSION NUMBER: SE013888

PUBLICATION DATE: 72

TITLE: INTRODUCTION TO ENVIRONMENTAL SCIENCE. PROGRAMMED LEARNING AID SERIES.

PERSONAL AUTHOR: FOSTER, PHILLIPS W.

DESCRIPTOR: *AUTOINSTRUCTIONAL PROGRAMS; COLLEGE SCIENCE; DEMOGRAPHY; *ECOLOGY; ECONOMICS; ENERGY; *ENVIRONMENTAL EDUCATION; POLICY; POLLUTION; *PROGRAMED TEXTS

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 181P.; IRWIN PLAID SERIES

ISSUE: RIEOCT72

ABSTRACT: THERE ARE SIX MAJOR SECTIONS IN THIS TEXT DESIGNED FOR SUPPLEMENTARY SELF-STUDY IN AN INTRODUCTORY COLLEGE ENVIRONMENTAL SCIENCE COURSE. THE SECTIONS (HISTORICAL PERSPECTIVES, MAN'S DISRUPTION OF HIS ENVIRONMENT, ECOSYSTEMS--ESPECIALLY THE BIOSPHERE, POPULATION GROWTH AND URBANIZATION, THE VARIOUS COSTS OF ENVIRONMENTAL DECAY, AND ENVIRONMENTAL TRADE-OFFS AND PUBLIC POLICY) CONTAIN A NUMBER OF TEXT PASSAGES OF ONE AND TWO PAGES, FOLLOWED BY A SET OF RELATED DIAGNOSTIC QUESTIONS. STUDENTS ARE REFERRED TO ANNOTATED ANSWERS TO THESE QUESTIONS AND ARE EXPECTED TO REVIEW MATERIAL THAT THEY DO NOT UNDERSTAND BEFORE PROCEEDING TO THE NEXT PASSAGE. THERE ARE THREE REVIEW TESTS (EACH WITH ANSWERS), A GLOSSARY OF TERMS, AND AN INDEX. (AL)

AVAILABILITY: LEARNING SYSTEMS COMPANY, RICHARD D. IRWIN, INC., HOMEWOOD, ILLINOIS 60430

ACCESSION NUMBER: ED064150

CLEARINGHOUSE ACCESSION NUMBER: SE014130

PUBLICATION DATE: APR 72

TITLE: TEACHING SCIENCE VIA A SOCIO-HISTORICAL APPROACH.

PERSONAL AUTHOR: AGIN, MICHAEL L.

DESCRIPTOR: *ATOMIC THEORY; CURRICULUM DEVELOPMENT; ENERGY; EVALUATION; INSTRUCTION; *PHYSICAL SCIENCES; *SCIENCE COURSES; SCIENCE HISTORY; *SECONDARY SCHOOL STUDENTS; SOCIAL PROBLEMS; NARST

EDRS PRICE: EDRS PRICE MF-$0.75 HC-$1.50 PLUS POSTAGE

DESCRIPTIVE NOTE: 20P.; PAPER PRESENTED AT THE NATIONAL ASSOCIATION FOR RESEARCH IN SCIENCE TEACHING ANNUAL MEETING (45TH, CHICAGO, ILLINOIS, APRIL 1972)

ISSUE: RIEOCT72

ABSTRACT: PRESENTED AT THE ANNUAL MEETING OF THE NATIONAL ASSOCIATION FOR RESEARCH IN SCIENCE TEACHING (NARST) IN APRIL, 1972, IN CHICAGO, THIS STUDY SUBSTANTIATED THE FEASIBILITY OF TEACHING SCIENCE VIA A SOCIO-HISTORICAL APPROACH UTILIZING SELECTED CONCEPTS RELATED TO THE SOCIAL AND HISTORICAL DEVELOPMENT OF SCIENCE AND SELECTED CONCEPTS RELATED TO ATOMIC ENERGY. THERE WAS A SIGNIFICANT INCREASE IN SUBJECT MATTER KNOWLEDGE, AND A MAJORITY OF STUDENTS WERE INTERESTED IN THE COURSE. (CP)

ACCESSION NUMBER: ED065296

CLEARINGHOUSE ACCESSION NUMBER: SE014153

PUBLICATION DATE: 71

TITLE: THE ENVIRONMENTAL IMPACT OF ELECTRICAL GENERATION: NUCLEAR VS. CONVENTIONAL.

PERSONAL AUTHOR: MCDERMOTT, JOHN J., ED.

INSTITUTION CODE: BBB05056

DESCRIPTOR: ELECTRICITY; *ENERGY; *ENVIRONMENTAL EDUCATION; ENVIRONMENTAL INFLUENCES; *INSTRUCTIONAL MATERIALS; *PROGRAM DESCRIPTIONS; *SECONDARY SCHOOL SCIENCE; UNITS OF STUDY (SUBJECT FIELDS)

EDRS PRICE: EDRS PRICE MF-$0.75 HC-$7.80 PLUS POSTAGE

DESCRIPTIVE NOTE: 154P.

ISSUE: RIENOV72

ABSTRACT: THIS MINICOURSE, PARTIALLY SUPPORTED BY THE DIVISION OF NUCLEAR EDUCATION AND TRAINING OF THE U.S. ATOMIC ENERGY COMMISSION, IS AN EFFORT TO DESCRIBE THE BENEFIT-TO-RISK RATIO OF VARIOUS METHODS OF GENERATING ELECTRICAL POWER. IT ATTEMPTS TO PRESENT AN UNBIASED, STRAIGHTFORWARD, AND OBJECTIVE VIEW OF THE ADVANTAGES AND DISADVANTAGES OF NUCLEAR GENERATION OF ELECTRICITY. THROUGH READING AND OTHER ACTIVITIES, THE STUDENT CONSIDERS THE GENERATION OF ELECTRICAL ENERGY, NUCLEAR REACTORS, BIOLOGICAL EFFECTS, WASTE PRODUCTS, PLANT SITES, ENVIRONMENTAL IMPACT, AND COSTS. (CP)

INSTITUTION NAME: PENNSYLVANIA STATE DEPT. OF EDUCATION, HARRISBURG. BUREAU OF GENERAL AND ACADEMIC EDUCATION.

ACCESSION NUMBER: ED066258

CLEARINGHOUSE ACCESSION NUMBER: RC006376

PUBLICATION DATE: 22 AUG 72

TITLE: SOME ALTERNATIVE MEASURES OF NATIONAL DEVELOPMENT AND COMPLEXITY: AN EVALUATION AND RECOMMENDATION.

PERSONAL AUTHOR: SOFRANKO, ANDREW J.; AND OTHERS

DESCRIPTOR: DEVELOPED NATIONS; *DEVELOPING NATIONS; ECONOMIC FACTORS; *EDUCATIONAL IMPROVEMENT; ENERGY; POLITICAL INFLUENCES; *RESOURCES; RURAL AREAS; SOCIAL WELFARE; *SOCIOLOGY; TABLES (DATA); *TELECOMMUNICATION

EDRS PRICE: EDRS PRICE MF-$0.75 HC-$1.50 PLUS POSTAGE

DESCRIPTIVE NOTE: 29P.; PAPER PRESENTED AT THE THIRD WORLD CONGRESS OF RURAL SOCIOLOGY, BATON ROUGE, LOUISIANA, AUGUST 22, 1972

ISSUE: RIEDEC72

ABSTRACT: THE PURPOSE OF THIS PAPER IS TO ASSESS THE PREDICTIVE UTILITY OF SEVERAL MEASURES OF THE OVERALL STATE OF SOCIETAL SYSTEMS AS WELL AS TO DETERMINE THE DEGREE OF OVERLAP OF THE DIFFERENT MEASURES. DATA FOR 74 NATIONS REPRESENTING ALL GEOGRAPHIC AREAS OF THE WORLD ARE PRESENTED AND ANALYZED. THE 5 MEASURES OF SOCIETAL SYSTEMS CHOSEN FOR COMPARISON ARE THE POWER-TOOL MEASURE, ENERGY CONSUMPTION, HUMAN RESOURCE DEVELOPMENT INDEX, INDEX OF SOCIETAL DIFFERENTIATION, AND GROSS NATIONAL PRODUCT PER CAPITA. THE 5 SOCIETAL SECTORS CONSIDERED IN CONSTRUCTING DIFFERENTIATION INDICES ARE POLITICAL, ECONOMIC, EDUCATION, SOCIAL WELFARE, AND COMMUNICATION. THE AUTHORS CONCLUDE THAT ALL THE MEASURES ARE NOT APPARENTLY MEASURING DIFFERENT ASPECTS OF SOCIETY, BUT THE MEASURES APPEAR TO TAP SOME SIMILAR UNDERLYING DIMENSION OF SOCIETY. THEY SUGGEST THE USE OF AN ENERGY CONSUMPTION MEASURE AS THE BEST MEASURE OF SOCIETAL MODERNIZATION AND OF THE STATUS OF SOCIETIES RELATIVE TO OTHER SOCIETIES. (PS)

ACCESSION NUMBER: ED067273

CLEARINGHOUSE ACCESSION NUMBER: SE014815

PUBLICATION DATE: 72

TITLE: COMBINED FILM CATALOG, 1972, UNITED STATES ATOMIC ENERGY COMMISSION.

INSTITUTION CODE: FGK04843

DESCRIPTOR: *AUDIOVISUAL AIDS; ECOLOGY; *ENERGY; *ENVIRONMENTAL EDUCATION; HEALTH EDUCATION; INSTRUCTIONAL MATERIALS; *NUCLEAR PHYSICS; *PHYSICAL SCIENCES; POLLUTION; RADIATION

EDRS PRICE: EDRS PRICE MF-$0.75 HC-$3.15 PLUS POSTAGE

DESCRIPTIVE NOTE: 73P.

ISSUE: RIEJAN73

ABSTRACT: A COMPREHENSIVE LISTING OF ALL CURRENT UNITED STATES ATOMIC ENERGY COMMISSION (USAEC) FILMS, THIS CATALOG DESCRIBES 232 FILMS IN TWO MAJOR FILM COLLECTIONS. PART ONE: EDUCATION-INFORMATION CONTAINS 17 SUBJECT CATEGORIES AND TWO SERIES AND DESCRIBES 134 FILMS WITH INDICATED UNDERSTANDING LEVELS ON EACH FILM FOR USE BY SCHOOLS. THE CATEGORIES INCLUDE SUCH SUBJECTS AS: BIOLOGY AND AGRICULTURE, ENVIRONMENT AND ECOLOGY; INDUSTRIAL APPLICATIONS, MEDICINE, PEACEFUL USES; POWER REACTORS; AND RESEARCH. PART TWO: TECHNICAL-PROFESSIONAL LISTS 10 SUBJECT CATEGORIES AND DESCRIBES 98 TECHNICAL FILMS FOR USE PRIMARILY BY PROFESSIONAL AUDIENCES SUCH AS COLLEGES AND UNIVERSITIES, INDUSTRY, RESEARCHERS, SCIENTISTS, ENGINEERS AND TECHNOLOGISTS. THE SUBJECTS INCLUDE: ENGINEERING, FUELS, MEDICINE, PEACEFUL NUCLEAR EXPLOSIVES, PHYSICAL RESEARCH, AND PRINCIPLES OF ATOMIC ENERGY. ALL FILMS ARE AVAILABLE FROM THE FIVE USAEC LIBRARIES LISTED. A SECTION ON "ADVICE TO BORROWERS" AND REQUEST FORMS FOR ORDERING AEC FILMS FOLLOW. (LK)

INSTITUTION NAME: ATOMIC ENERGY COMMISSION, WASHINGTON, D.C.

ACCESSION NUMBER: ED067303

CLEARINGHOUSE ACCESSION NUMBER: SE014915

PUBLICATION DATE: 72

TITLE: TEACHERS ENVIRONMENTAL RESOURCE UNIT: ENERGY AND POWER.

PERSONAL AUTHOR: BEMISS, CLAIR W.

INSTITUTION CODE: BBB06718

SPONSORING AGENCY CODE: BBB00077

DESCRIPTOR: *ENERGY; ENVIRONMENTAL EDUCATION; ENVIRONMENTAL INFLUENCES; *FUEL CONSUMPTION; *INSTRUCTIONAL MATERIALS; KINETICS; *RESOURCE UNITS; TEACHING GUIDES; *TECHNOLOGY; ESEA TITLE III

EDRS PRICE: EDRS PRICE MF-$0.75 HC-$1.85 PLUS POSTAGE

DESCRIPTIVE NOTE: 49P.

ISSUE: RIEJAN73

ABSTRACT: PROBLEMS ASSOCIATED WITH ENERGY PRODUCTION AND POWER ARE STUDIED IN THIS TEACHER'S GUIDE TO BETTER UNDERSTAND THE IMPACT OF MAN'S ENERGY PRODUCTION ON THE ENVIRONMENT, HOW HE CONSUMES ENERGY, AND IN WHAT QUANTITIES. THE RESOURCE UNIT IS INTENDED TO PROVIDE THE TEACHER WITH BASIC INFORMATION THAT WILL AID CLASSROOM REVIEW OF THESE PROBLEMS. TOPICS FOCUS ON SOLAR ENERGY, MAN AND ENERGY, ENERGY EFFICIENCY, FOSSIL FUEL CONSUMPTION AND POLLUTION, NUCLEAR ENERGY, GEOTHERMAL ENERGY, SUPERCONDUCTIVITY, MAGNETOHYDRODYNAMICS, AND WASTE RECYCLING. A BIBLIOGRAPHY IS INCLUDED. THIS WORK WAS PREPARED UNDER AN ESEA TITLE III CONTRACT FOR THE PROJECT "BROAD SPECTRUM ENVIRONMENTAL EDUCATION PROGRAM." (BL)

INSTITUTION NAME: BREVARD COUNTY SCHOOL BOARD, COCOA, FLA.

SPONSORING AGENCY NAME: BUREAU OF ELEMENTARY AND SECONDARY EDUCATION (DHEW/OE), WASHINGTON, D.C.

ACCESSION NUMBER: ED068350

CLEARINGHOUSE ACCESSION NUMBER: SE014961

PUBLICATION DATE: JUL 72

TITLE: UNIT: ENERGY AND CHANGE, INSPECTION PACK, NATIONAL TRIAL PRINT.

INSTITUTION CODE: BBB05339

DESCRIPTOR: CURRICULUM; *ENERGY; INSTRUCTION; *LABORATORY MANUALS; PHYSICAL SCIENCES; *SCIENCE COURSE IMPROVEMENT PROJECT; SECONDARY SCHOOL SCIENCE; *TEACHING GUIDES; *UNITS OF STUDY (SUBJECT FIELDS); AUSTRALIAN SCIENCE EDUCATION PROJECT

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 280P.

ISSUE: RIEFEB73

ABSTRACT: THIS REVISED TRIAL VERSION OF ED 061 083 IS A UNIT OF THE AUSTRALIAN SCIENCE EDUCATION PROJECT MATERIALS FOR GRADES SEVEN THROUGH TEN IN AUSTRALIAN SECONDARY SCHOOLS. IT IS INTENDED FOR STUDENTS IN THE CONCRETE OPERATIONS STAGE OF INTELLECTUAL DEVELOPMENT. IT PROVIDES ACTIVITIES TO GIVE STUDENTS A BROAD INTRODUCTION TO THE CONCEPT OF ENERGY, WHICH IS TREATED AS A MODEL THAT SCIENTISTS FIND USEFUL TO EXPLAIN CHANGE. THE TEACHER'S GUIDE TO THE UNIT IS AN ANNOTATED COPY OF THE STUDENT MANUAL, GIVING IDEAS FOR ASSISTING STUDENTS TO DEVELOP THE CONCEPT, LISTS OF APPARATUS REQUIRED, AND SUGGESTED REFERENCES FOR STUDENTS AND TEACHERS. ALL STUDENTS ARE EXPECTED TO COMPLETE THE INTRODUCTORY UNIT AND THEN TO CHOOSE ONE OR MORE OF THE FIVE OPTIONS: "STORED ENERGY," "ENERGY AND LIFE," "ENERGY CONVERTERS," "COMBUSTION," AND "USING THE ENERGY FUELS." EACH OPTION CONTAINS INSTRUCTIONS FOR NUMEROUS ACTIVITIES, POSES QUESTIONS TO BE ANSWERED IN THE STUDENT WORKBOOK, AND PROVIDES BACKGROUND INFORMATION. DIAGNOSTIC TESTS AND LISTS OF CORRECT ANSWERS, WITH DISCUSSIONS OF THE INCORRECT CHOICES, ARE INCLUDED IN THE STUDENT'S BOOKLET. (AL)

AVAILABILITY: ERIC/SMEAC, 1460 WEST LANE AVENUE, COLUMBUS, OHIO 43221 (ON LOAN)

INSTITUTION NAME: AUSTRALIAN SCIENCE EDUCATION PROJECT, TOORAK, VICTORIA.

ACCESSION NUMBER: ED069551

CLEARINGHOUSE ACCESSION NUMBER: SE015444

PUBLICATION DATE: 71

TITLE: NUFFIELD SECONDARY SCIENCE, THEME 4, HARNESSING ENERGY.

PERSONAL AUTHOR: HOWARD, EDGAR

INSTITUTION CODE: BBB04628

DESCRIPTOR: *ELECTRICITY; *ENERGY; *HEAT; *INSTRUCTION; INSTRUCTIONAL MATERIALS; PHYSIOLOGY; SCIENCE ACTIVITIES; SECONDARY SCHOOL SCIENCE; *TEACHING GUIDES; UNITS OF STUDY (SUBJECT FIELDS); *NUFFIELD SECONDARY SCIENCE

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 187P.

ISSUE: RIEMAR73

ABSTRACT: NUFFIELD SECONDARY SCIENCE IS A SET OF TESTED MATERIALS FROM WHICH TEACHERS CAN PREPARE COURSES FOR STUDENTS IN GRADES 9-11 (APPROXIMATELY) WHO DO NOT INTEND TO MAJOR IN SCIENCE. THE MATERIALS ARE DESIGNED FOR BRITISH SECONDARY SCHOOLS BUT ARE ADAPTABLE TO OTHER COUNTRIES. THE TEACHERS' GUIDE TO THE ENTIRE SET OF THEMES IS DESCRIBED IN SE 015 440 AND THE NATURE OF EACH THEME SUMMARIZED IN SE 015 441. THEME 4 CONTAINS THE FOLLOWING FIELDS OF STUDY (WITH SUBSIDIARY SECTIONS INDICATED IN PARENTHESES): ENERGY IN ACTION (ENERGY CONVERSION, ENERGY AND MOVEMENT, ENERGY AND CHANGES IN MATERIALS); MAN'S ENERGY; HIS PHYSICAL LIMITATIONS AND THE USE OF MACHINES (EXERTING AND MEASURING FORCES, EXERTING FORCES BY SIMPLE MACHINES, DOING WORK IN SIMPLE SITUATIONS, PHYSIOLOGICAL EFFECTS OF DOING WORK, POWER OUTPUT OF HUMAN BODY, POWER OF ENGINES AND MOTORS, WORKING THROUGH MACHINES); ELECTRICAL TRANSMISSION OF ENERGY (INTRODUCTORY INVESTIGATIONS, VERSATILITY OF ELECTRICITY, SIMPLE D.C. CIRCUITS, USE OF ALTERNATING CURRENT, MOTORS AND DYNAMOS, CONVERTING A.C. AND D.C.); AND PROBLEMS OF BRINGING ENERGY TO BEAR (HEAT, ENTROPY, EFFICIENT USE OF FUELS). SEE ALSO SE 015 442 TO SE 015 448. (AL)

AVAILABILITY: LONGMAN GROUP LIMITED, 74 GROSVENOR STREET, LONDON W1, ENGLAND

INSTITUTION NAME: NUFFIELD FOUNDATION, LONDON (ENGLAND).

ACCESSION NUMBER: ED070570

CLEARINGHOUSE ACCESSION NUMBER: SE014094

PUBLICATION DATE: 71

TITLE: A BEHAVIORAL CONTENT ANALYSIS OF TEACHER'S EDITIONS OF SELECTED JUNIOR HIGH SCHOOL INQUIRY SCIENCE CURRICULA.

PERSONAL AUTHOR: LADUCA, ANTHONY

DESCRIPTOR: CURRICULUM; DOCTORAL THESES; *INSTRUCTIONAL MATERIALS; *QUESTIONING TECHNIQUES; SCIENCE EDUCATION; *SECONDARY SCHOOL SCIENCE; TEACHING GUIDES; TEACHING MODELS; TEACHING PROCEDURES; *TEXTBOOK EVALUATION; *TEXTBOOKS; EARTH SCIENCE CURRICULUM PROJECT; INTERACTION OF MAN AND THE BIOSPHERE; INTERACTION OF MATTER AND ENERGY; INTERMEDIATE SCIENCE CURRICULUM STUDY; INTRODUCTORY PHYSICAL SCIENCE; RESEARCH REPORTS

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 162P.; PH.D. DISSERTATION, NEW YORK UNIVERSITY

ISSUE: RIEAPR73

ABSTRACT: THE PURPOSE OF THIS STUDY WAS TO IDENTIFY THE TEACHING MODELS CONTAINED IN TEACHER'S EDITIONS OF SELECTED JUNIOR HIGH SCHOOL INQUIRY SCIENCE MATERIALS. THE METHODOLOGY EMPLOYED A SYSTEMATIC CONTENT ANALYSIS OF THE TEACHER'S EDITIONS USING AN INSTRUMENT OF THE INVESTIGATOR'S DESIGN. THE SAMPLE CONSISTED OF THE COMMERCIALLY PUBLISHED TEACHER'S EDITIONS FROM THE FOLLOWING CURRICULA: (1)EARTH SCIENCE CURRICULUM PROJECT (ESCP); (2) INTERACTION OF MAN AND THE BIOSPHERE (IMB); (3) INTERACTION OF MATTER AND ENERGY (IME); (4) INTERMEDIATE SCIENCE CURRICULUM STUDY (ISCS); AND (5) INTRODUCTORY PHYSICAL SCIENCE (IPS). AS A RESULT OF THE ANALYSIS, THE EDITIONS WERE DIVIDED INTO THREE GROUPS IDENTIFIED AS: THE LECTURE/DISCUSSION MODEL, THE INQUIRY DISCUSSION MODEL, AND THE PROCESS MANAGEMENT MODEL. THE LATTER TWO SEEM APPROPRIATE TO THE ACCOMPLISHMENT OF INQUIRY OBJECTIVES, WHILE THE FIRST SHOWS SERIOUS LIMITATIONS. (AUTHOR/RH)

AVAILABILITY: UNIVERSITY MICROFILMS, 300 NORTH ZEEB ROAD, ANN ARBOR, MICHIGAN 48106 (ORDER NO. 72-11,465 M-$4.00 X-$10.00)

ACCESSION NUMBER: ED070606

CLEARINGHOUSE ACCESSION NUMBER: SE014971

PUBLICATION DATE: 72

TITLE: NUCLEAR POWER AND THE ENVIRONMENT.

INSTITUTION CODE: BB803882

DESCRIPTOR: BIBLIOGRAPHIC CITATIONS; *CONFERENCE REPORTS; *ENERGY; ENVIRONMENTAL EDUCATION; HEALTH EDUCATION; *PUBLIC HEALTH; *RADIATION; *SAFETY; SCIENCE EDUCATION

EDRS PRICE: EDRS PRICE MF-$0.75 HC-$4.20 PLUS POSTAGE

DESCRIPTIVE NOTE: 92P.

ISSUE: RIEAPR73

ABSTRACT: THIS BOOKLET IS A SUMMARY OF AN INTERNATIONAL SYMPOSIUM, HELD IN AUGUST 1970 IN NEW YORK CITY, ON THE ENVIRONMENTAL ASPECTS OF NUCLEAR POWER STATIONS. THE SYMPOSIUM WAS CONVENED UNDER THE SPONSORSHIP OF THE INTERNATIONAL ATOMIC ENERGY AGENCY (IAEA) AND THE U.S. ATOMIC ENERGY COMMISSION (USAEC). THE INFORMATION IS PRESENTED IN A CONDENSED AND READILY UNDERSTANDABLE FORM, AND IT IS HOPED THAT IT WILL BE USEFUL TO THOSE INTERESTED IN A SUMMARY VIEW OF THE PUBLIC HEALTH AND ENVIRONMENTAL ASPECTS OF NUCLEAR POWER PRODUCTION. CONTENTS ARE ORGANIZED ACCORDING TO MAJOR HEADINGS AS FOLLOWS: "THE ROLE OF ATOMIC ENERGY IN MEETING FUTURE POWER NEEDS," "RADIATION PROTECTION STANDARDS," "SAFE HANDLING OF RADIOACTIVE MATERIALS," "OTHER IMPACTS," "PUBLIC HEALTH CONSIDERATIONS," AND "SUMMARY." INCLUDED IN THE SUMMARY ARE LISTS OF "PERTINENT PUBLICATIONS" OF THE IAEA, THE WORLD HEALTH ORGANIZATION (WHO), OTHER INTERNATIONAL BODIES, AND A LIST OF CONSULTANTS AND CONTRIBUTORS. IN ADDITION TO THE SYMPOSIUM SUMMARY, THIS BOOKLET ALSO CONTAINS CONTRIBUTIONS SUPPLIED BY 26 EXPERTS FROM IAEA AND WHO AND A NUMBER OF MEMBER STATES. (LK)

INSTITUTION NAME: INTERNATIONAL ATOMIC ENERGY AGENCY, VIENNA (AUSTRIA).

ACCESSION NUMBER: ED070607

CLEARINGHOUSE ACCESSION NUMBER: SE014972

PUBLICATION DATE: 72

TITLE: NUCLEAR ENERGY AND THE ENVIRONMENT.

INSTITUTION CODE: BB803882

DESCRIPTOR: BIBLIOGRAPHIC CITATIONS; *ENERGY; ENVIRONMENTAL EDUCATION; HEALTH EDUCATION; *PUBLICATIONS; *PUBLIC HEALTH; *RADIATION; REFERENCE MATERIALS; *SAFETY; SCIENCE EDUCATION

EDRS PRICE: EDRS PRICE MF-$0.75 HC-$1.85 PLUS POSTAGE

DESCRIPTIVE NOTE: 44P.

ISSUE: RIEAPR73

ABSTRACT: "NUCLEAR ENERGY AND THE ENVIRONMENT" IS A POCKET FOLDER OF REMOVABLE LEAFLETS CONCERNED WITH TWO MAJOR TOPICS: NUCLEAR ENERGY AND NUCLEAR TECHNIQUES. UNDER NUCLEAR ENERGY, LEAFLETS CONCERNING THE TOPICS OF "RADIATION—A FACT OF LIFE," "THE IMPACT OF A FACT," 1963 TEST BAN TREATY," "ENERGY NEEDS AND NUCLEAR POWER," "POWER REACTOR SAFETY," "TRANSPORT," AND "WASTE MANAGEMENT" WILL BE FOUND. LEAFLETS CONCERNING THE TOPICS OF "IN AIR," "IN WATER," "AGRICULTURAL RESOURCES," "IN MEDICINE," AND "IN THE FUTURE" ARE INCLUDED UNDER NUCLEAR TECHNIQUES. A LIST OF INTERNATIONAL ATOMIC ENERGY AGENCY PUBLICATIONS ON NUCLEAR ENERGY, THE ENVIRONMENT, AND POLLUTION IS ALSO INCLUDED. (LK)

INSTITUTION NAME: INTERNATIONAL ATOMIC ENERGY AGENCY, VIENNA (AUSTRIA).

ACCESSION NUMBER: ED070619

CLEARINGHOUSE ACCESSION NUMBER: SE015094

PUBLICATION DATE: 70

TITLE: THE FEASIBILITY OF TEACHING SCIENCE VIA A SOCIO-HISTORICAL APPROACH.

PERSONAL AUTHOR: AGIN, MICHAEL LAWRENCE

DESCRIPTOR: ACHIEVEMENT; *CURRICULUM DEVELOPMENT; DOCTORAL THESES; *INSTRUCTION; *INSTRUCTIONAL MATERIALS; *SECONDARY SCHOOL SCIENCE; UNITS OF STUDY (SUBJECT FIELDS); ATOMIC ENERGY; RESEARCH REPORTS

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 641P.; PH.D. DISSERTATION, THE UNIVERSITY OF WISCONSIN

ISSUE: RIEAPR73

ABSTRACT: THE PURPOSE OF THIS STUDY WAS TO DETERMINE THE FEASIBILITY OF TEACHING SCIENCE VIA A SOCIO-HISTORICAL APPROACH UTILIZING SELECTED CONCEPTS RELATED TO SOCIAL AND HISTORICAL DEVELOPMENTS OF SCIENCE AND SELECTED CONCEPTS RELATED TO ATOMIC ENERGY. INSTRUCTION MATERIALS INCLUDED TEXTUAL MATERIALS DEVELOPED BY THE INVESTIGATOR, A TEST, A SERIES OF SLIDES, AND FOUR MOTION PICTURES. THE INVESTIGATOR TAUGHT THE UNIT TO TWO DIFFERENT HIGH SCHOOL POPULATIONS (ONE 107 STUDENTS, THE OTHER 76 STUDENTS). MEAN GAINS FOR THE SUBTEST AND TOTAL TEST WERE SIGNIFICANT FOR BOTH SCHOOLS. STUDENT RESPONSES INDICATED A MAJORITY OF THE STUDENTS IN BOTH SCHOOLS EXPRESSED A POSITIVE OPINION TOWARD THE INTEREST PRODUCING POTENTIAL OF THE UNIT. (AUTHOR/RH)

AVAILABILITY: UNIVERSITY MICROFILMS, 300 NORTH ZEEB ROAD, ANN ARBOR, MICHIGAN 48106 (ORDER NO. 71-280 M-$4.00 X-$10.00)

ACCESSION NUMBER: ED070649

CLEARINGHOUSE ACCESSION NUMBER: SE015389

PUBLICATION DATE: JUN 72

TITLE: THE ENVIRONMENTAL AND ECOLOGICAL FORUM 1970-1971.

INSTITUTION CODE: BBB07192

DESCRIPTOR: CONFERENCE REPORTS; *ECOLOGY; *ENERGY; ENVIRONMENT; *KINETICS; NUCLEAR PHYSICS; PRODUCTION TECHNIQUES; PUBLIC AFFAIRS EDUCATION; RADIATION EFFECTS; SOCIOECONOMIC INFLUENCES; *SPEECHES; *TECHNOLOGY

EDRS PRICE: EDRS PRICE MF-$0.75 HC-$9.00 PLUS POSTAGE

DESCRIPTIVE NOTE: 196P.; PAPERS PRESENTED IN THE 1970-1971 ENVIRONMENTAL AND ECOLOGICAL FORUM SERIES

ISSUE: RIEAPR73

ABSTRACT: THIS REPORT CONTAINS THE PAPERS PRESENTED IN THE 1970-1971 ENVIRONMENTAL AND ECOLOGICAL FORUM SERIES, PLANNED TO PROVIDE AN OVERVIEW OF THE SIGNIFICANT ENVIRONMENTAL, SOCIAL, AND ECONOMIC ASPECTS OF ELECTRIC POWER GENERATION, MORE SPECIFICALLY, THE PROS AND CONS OF NUCLEAR POWER PRODUCTION. THE FORUM WAS ORGANIZED AS A PUBLIC SERVICE TO FOSTER COMMUNITY UNDERSTANDING OF ENVIRONMENTAL PROBLEMS THAT INCREASINGLY TAX SOCIETY'S CAPABILITIES FOR REMEDIAL ACTION. SPEAKERS WITH WIDELY DIVERGENT OPINIONS DISCUSSED THE VARIOUS WAYS IN WHICH THE INCREASING DEVELOPMENT AND USE OF TECHNOLOGY MAY AFFECT MAN'S WELL-BEING. THEIR PRESENTATIONS WERE TITLED: MAN'S CONQUEST OF ENERGY: ITS ECOLOGICAL AND HUMAN CONSEQUENCES; THE NUCLEAR ENERGY VS. THE ENVIRONMENT; NUCLEAR POWER PLANTS: PRESENT, PAST, AND FUTURE; THE RADIATION HAZARD FOR MAN; A PROPOSAL FOR A RATIONAL POLICY TO CONTROL RADIOACTIVITY AND OTHER FORMS OF POLLUTION; THE PUBLIC AND RADIATION FROM NUCLEAR POWER PLANTS; ADEQUACY OF PRESENT RADIATION STANDARDS; THE NUCLEAR POWER INFORMATION COMMUNICATION PREDICAMENT; NUCLEAR POWER LICENSING: RISK—BENEFIT DETERMINATIONS AND THE PUBLIC INTEREST; NUCLEAR POWER: YOU NEVER HAD IT SO GOOD; BENEFITS AND COSTS OF NUCLEAR POWER; AND WHAT WE DO KNOW ABOUT LOW-LEVEL RADIATION. (BL)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, U.S. DEPARTMENT OF COMMERCE, SPRINGFIELD, VIRGINIA 22151 (TID-25857, $3.00)

INSTITUTION NAME: ATOMIC ENERGY COMMISSION, WASHINGTON, D. C. OFFICE OF INFORMATION SERVICES.

ACCESSION NUMBER: ED071894

CLEARINGHOUSE ACCESSION NUMBER: SE015531

PUBLICATION DATE: 68

TITLE: PROJECT PHYSICS HANDBOOK 3, THE TRIUMPH OF MECHANICS.

INSTITUTION CODE: MGG30910

SPONSORING AGENCY CODE: RMQ66004

DESCRIPTOR: ENERGY; INSTRUCTIONAL MATERIALS; KINETIC MOLECULAR THEORY; LABORATORY EXPERIMENTS; *LABORATORY MANUALS; *PHYSICS; SCIENCE ACTIVITIES; *SCIENCE EXPERIMENTS; SECONDARY GRADES; *SECONDARY SCHOOL SCIENCE; HARVARD PROJECT PHYSICS

EDRS PRICE: EDRS PRICE MF-$0.75 HC-$5.40 PLUS POSTAGE

DESCRIPTIVE NOTE: 125P.; AUTHORIZED INTERIM VERSION

ISSUE: RIEMAY73

ABSTRACT: TEN EXPERIMENTS AND 27 ACTIVITIES ARE PRESENTED IN THIS HANDBOOK. THE EXPERIMENTS ARE RELATED TO COLLISIONS, ENERGY CONSERVATION, SPEED MEASUREMENTS, THERMOMETRY, CALORIMETRY, GAS PROPERTIES, WAVE MOTIONS, AND ACOUSTIC PROBLEMS. THE ACTIVITIES ARE CONCERNED WITH STROBOSCOPIC

PHOTOGRAPHS IN COLLISION, ELASTIC IMPACT, MASS CONSERVATION, EXCHANGE OF MOMENTUM, HERON'S ENGINE, GRAVITATIONAL ACCELERATION, ENERGY IN A PENDULUM, CROOKE'S RADIOMETER, MECHANICAL EQUIVALENT OF HEAT, GAS THEORIES, SPEED DISTRIBUTION, ROCKETS, PERPETUAL MOTION MACHINES, "LEAST-TIME" OR "LEAST-ENERGY" SITUATIONS, STANDING WAVES, MOIRE PATTERNS, MUSIC AND SPEECH, AND SPEED OF SOUND. DEMONSTRATIONS, CONSTRUCTION PROJECTS, AND SELF-DIRECTED INSTRUCTIONS ARE STRESSED IN THESE ACTIVITIES. THE FOUR CHAPTERS IN THE HANDBOOK ARE DESIGNED TO CORRESPOND TO THE TEXT, WITH COMPLETE INSTRUCTIONS IN EACH EXPERIMENT. SOME EXPERIMENTS AND ACTIVITIES ARE SUGGESTED FOR ASSIGNMENT, AND THE REMAINING ARE USED AT STUDENT DISCRETION. BESIDES ILLUSTRATIONS AND FILM LOOP NOTES FOR EXPLANATION USE, A REPRINTED ARTICLE CONCERNING COLLATERAL READING IS INCLUDED. THE WORK OF HARVARD PROJECT PHYSICS HAS BEEN FINANCIALLY SUPPORTED BY: THE CARNEGIE CORPORATION OF NEW YORK, THE FORD FOUNDATION, THE NATIONAL SCIENCE FOUNDATION, THE ALFRED P. SLOAN FOUNDATION, THE UNITED STATES OFFICE OF EDUCATION, AND HARVARD UNIVERSITY. (CC)

CONTRACT NUMBER: OEC-5-10-058

BUREAU NUMBER: BR-5-1038

INSTITUTION NAME: HARVARD UNIV., CAMBRIDGE, MASS. HARVARD PROJECT PHYSICS.

SPONSORING AGENCY NAME: OFFICE OF EDUCATION (DHEW), WASHINGTON, D.C. BUREAU OF RESEARCH.

ACCESSION NUMBER: ED071895

CLEARINGHOUSE ACCESSION NUMBER: SE015532

PUBLICATION DATE: 68

TITLE: PROJECT PHYSICS TEXT 3, THE TRIUMPH OF MECHANICS.

INSTITUTION CODE: HGG30910

SPONSORING AGENCY CODE: RMQ66004

DESCRIPTORS: *ENERGY; INSTRUCTIONAL MATERIALS; KINETIC MOLECULAR THEORY; *PHYSICS; SCIENTIFIC CONCEPTS; SECONDARY GRADES; *SECONDARY SCHOOL SCIENCE; *TEXTBOOKS; *THERMODYNAMICS; HARVARD PROJECT PHYSICS

EDRS PRICE: EDRS PRICE MF-$0.75 HC-$7.80 PLUS POSTAGE

DESCRIPTIVE NOTE: 169P.; AUTHORIZED INTERIM VERSION

ISSUE: RIEMAY73

ABSTRACT: MECHANICAL THEORIES ARE PRESENTED IN THIS UNIT OF THE PROJECT PHYSICS TEXT FOR SENIOR HIGH STUDENTS. COLLISIONS, NEWTON'S LAWS, ISOLATED SYSTEMS, AND LEIBNIZ' CONCEPT ARE DISCUSSED, LEADING TO CONSERVATION OF MASS AND MOMENTUM. ENERGY CONSERVATION IS ANALYZED IN TERMS OF MECHANICAL ENERGY, HEAT ENERGY, STEAM ENGINES, WATT'S ENGINE, JOULE'S EXPERIMENT, AND ENERGY IN BIOLOGICAL SYSTEMS. KINETIC THEORY OF GASES IS STUDIED IN CONNECTION WITH MOLECULAR SIZES AND SPEEDS, IDEAL GAS, SECOND THERMODYNAMIC LAW, STATISTICAL REPRESENTATIONS, TIME'S ARROW, AND RECURRENCE PARADOX. WAVE MODELS ARE INTRODUCED TO DEAL WITH THE SUPERPOSITION PRINCIPLE, SOUND PROPERTIES, AND WAVE INTERFERENCE, DIFFRACTION, REFLECTION, AND REFRACTION. HISTORICAL DEVELOPMENTS ARE STRESSED IN THE DESCRIPTION OF THIS UNIT. INCLUDED IS A CHART OF RENOWNED PEOPLE'S LIFE SPANS FROM 1700 TO 1850. BESIDES ILLUSTRATIONS FOR EXPLANATION USE, PROBLEMS WITH THEIR ANSWERS ARE ALSO PROVIDED IN TWO CATEGORIES: STUDY GUIDE AND END OF SECTION QUESTIONS. THE WORK OF HARVARD PROJECT PHYSICS HAS BEEN FINANCIALLY SUPPORTED BY: THE CARNEGIE CORPORATION OF NEW YORK, THE FORD FOUNDATION, THE NATIONAL SCIENCE FOUNDATION, THE ALFRED P. SLOAN FOUNDATION, THE UNITED STATES OFFICE OF EDUCATION, AND HARVARD UNIVERSITY. (CC)

CONTRACT NUMBER: OEC-5-10-058

BUREAU NUMBER: BR-5-1038

INSTITUTION NAME: HARVARD UNIV., CAMBRIDGE, MASS. HARVARD PROJECT PHYSICS.

SPONSORING AGENCY NAME: OFFICE OF EDUCATION (DHEW), WASHINGTON, D.C. BUREAU OF RESEARCH.

ACCESSION NUMBER: ED072666

CLEARINGHOUSE ACCESSION NUMBER: EM010829

PUBLICATION DATE: 71

TITLE: DIMENSIONS OF CHANGE.

PERSONAL AUTHOR: FABUN, DON

INSTITUTION CODE: CIQ39810

DESCRIPTORS: CHANGING ATTITUDES; *CITY PROBLEMS; COMMUNICATION (THOUGHT TRANSFER); *ECOLOGY; *ENERGY; FOOD; HOUSING; INSTITUTIONAL ROLE; SOCIAL CHANGE; *SOCIAL PROBLEMS; TECHNOLOGICAL ADVANCEMENT; *TECHNOLOGY; TELECOMMUNICATION; TRANSPORTATION

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 230P.

ISSUE: RIEJUN73

ABSTRACT: WHEN SIX CRUCIAL PROBLEM AREAS--ECOLOGY, SHELTER, ENERGY, FOOD, MOBILITY, AND TELECOMMUNICATIONS--WERE INVESTIGATED TO LEARN WHETHER THERE ARE TECHNOLOGICAL SOLUTIONS TO THESE PROBLEMS, THE RESULTS WERE DISCOURAGING. THAT IS, THERE ARE TECHNOLOGICAL SOLUTIONS TO MANY OF THESE PROBLEMS, BUT IN NONE OF THESE FIELDS, WITH THE POSSIBLE EXCEPTION OF COMMUNICATIONS, ARE THEY BEING USED IN ANY SIGNIFICANT WAY, NOR IS THERE ANY INDICATION THAT THEY MIGHT BE IN THE NEXT THREE DECADES. THE REASON FOR THIS SITUATION APPEARS TO BE THAT THE IMPOSITION OF INSTITUTIONS--GOVERNMENTAL, RELIGIOUS, EDUCATIONAL, AND CORPORATIVE--WHICH WERE FORMED IN AGRARIAN TIMES, DOES NOT ALLOW A TECHNOLOGICAL SOLUTION TO FUNCTION ANYWHERE NEARLY AS EFFICIENTLY AS IT COULD. THIS BOOK TAKES THE FORM OF SIX ESSAYS, PUT TOGETHER IN COLLEGE STYLE, INCORPORATING GRAPHICS AND QUOTATIONS AS WELL AS TEXT. THE SIXTH ESSAY, "TELECOMMUNICATIONS," IS DISCUSSED MORE FULLY IN EM 010 784. (JK)

AVAILABILITY: GLENCOE PRESS, 8701 WILSHIRE BLVD., BEVERLY HILLS, CALIFORNIA 90211

INSTITUTION NAME: KAISER ALUMINUM AND CHEMICAL CORP., OAKLAND, CALIF.

ACCESSION NUMBER: ED074609

CLEARINGHOUSE ACCESSION NUMBER: SO005622

PUBLICATION DATE: 73

TITLE: FILMS ON THE FUTURE: A SELECTIVE LISTING.

PERSONAL AUTHOR: MARTIN, MARIE

INSTITUTION CODE: BBB06996

DESCRIPTORS: AEROSPACE TECHNOLOGY; ANNOTATED BIBLIOGRAPHIES; *AUDIO VISUAL AIDS; AUTOMATION; BEHAVIORAL SCIENCES; BIOCHEMISTRY; BUSINESS; COMMUNICATIONS; DOCUMENTARIES; ECOLOGY; EDUCATION; ENERGY; *FILMS; FOOD; *FUTURES (OF SOCIETY); INSTRUCTIONAL FILMS; MEDIA SELECTION; OCEANOLOGY; POLLUTION; SCIENCE FICTION; *SOCIAL CHANGE; SOCIOLOGY; *TECHNOLOGICAL ADVANCEMENT; TECHNOLOGY; TRANSPORTATION

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 60P.

ISSUE: RIEJUL73

ABSTRACT: THIS ANNOTATED LIST OF FILMS FOCUSES ON FOURTEEN SUBJECT AREAS: 1) ATOMIC ENERGY/FUEL/POWER; 2) AUTOMATION/COMPUTER/DATA PROCESSING; 3) BIOCHEMICAL RESEARCH/BEHAVIORAL SCIENCES; 4) COMMUNICATIONS/TRANSPORTATION; 5) CONCEPTS; 6) ECOLOGY/POLLUTION/WEATHER MODIFICATION; 7) EDUCATION; 8) FOOD/POPULATION CONTROL; 9) OCEAN/OCEAN SCIENCES; 10) SOCIOLOGY/FUTURE LIFE STYLES; 11) SPACE/SPACE SCIENCES; 12) TECHNOLOGY/BUSINESS/INDUSTRY; 13) URBAN PLANNING; AND 14) SCIENCE FICTION FILMS. EACH ENTRY CONTAINS THE FOLLOWING INFORMATION: TITLE, YEAR OF RELEASE, RENTAL COST, LENGTH OF FILM, COLOR OR BLACK AND WHITE, RENTAL SOURCE AND FILM NUMBER, AND A BRIEF DESCRIPTION OF THE FILM. THE RANGE RUNS FROM FULL-LENGTH FEATURES TO TECHNICAL INFORMATION FILMS. (FDI)

AVAILABILITY: WORLD FUTURE SOCIETY, P.O. BOX 30369 - BETHESDA BRANCH, WASHINGTON, D.C. 20014 ($3.00)

INSTITUTION NAME: WORLD FUTURE SOCIETY, WASHINGTON, D. C.

ACCESSION NUMBER: ED074694

CLEARINGHOUSE ACCESSION NUMBER: EM010561

PUBLICATION DATE: 71

TITLE: COMMUNICATIONS AND ENERGY IN CHANGING URBAN ENVIRONMENTS. COLSTON PAPERS VOLUME 21.

PERSONAL AUTHOR: JONES, DOUGLAS, ED.

INSTITUTION CODE: BBB07965

DESCRIPTORS: BUILDING DESIGN; CLIMATIC FACTORS; COMMUNICATION PROBLEMS; *COMMUNICATIONS; CONFERENCE REPORTS; DESIGN NEEDS; ECOLOGY; *ENERGY; *ENVIRONMENT; ENVIRONMENTAL INFLUENCES; ENVIRONMENTAL RESEARCH; HUMAN ENGINEERING; INFORMATION NETWORKS; PLANNED COMMUNITY; SIMULATED ENVIRONMENT; SUBURBAN ENVIRONMENT; SYMPOSIA; TELECOMMUNICATION; TRANSPORTATION; *URBAN ENVIRONMENT; URBAN POPULATION; COLSTON RESEARCH SOCIETY; *GREAT BRITAIN

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 235P.; PROCEEDINGS OF THE SYMPOSIUM OF THE COLSTON RESEARCH SOCIETY (21ST, UNIVERSITY OF BRISTOL, GREAT BRITAIN, MARCH 24-28, 1969)

ISSUE: RIEAUG73

ABSTRACT: RECOGNIZING THAT THE NEED TO EXCHANGE INFORMATION HAS BEEN ONE OF THE CRITICAL INFLUENCES IN URBAN DESIGN, THE TWENTY-FIRST COLSTON RESEARCH SOCIETY (CMS) CONFERENCE EXPLORED A VARIETY OF TOPICS IN THE AREA OF COMMUNICATIONS, TRANSPORTATION, AND THE ENVIRONMENT. THESE SUBJECTS WERE PURSUED FROM THE BRITISH EXPERIENCE AND MOST ALL THE PAPERS HAVE SPECIFIC RELEVANCE TO EITHER GREATER LONDON OR GREAT BRITAIN. PRIMARILY THE CONFERENCE SCRUTINIZED THE CURRENT CONCEPT OF "CITY" BY MEANS OF A THEORETICAL SYSTEMS ANALYSIS THAT WAS BASED ON INFORMATION FLOW. ALSO DISCUSSED WERE THE FUTURE OF URBAN PLANNING, TELECOMMUNICATION, PUBLIC TRANSPORTATION, AND HUMAN INTERACTION. A SIMULATION MODEL FOR USE AS A DESIGN TOOL BY PLANNERS WAS PRESENTED. (MC)

AVAILABILITY: THE SHOE STRING PRESS, INC., 995 SHERMAN AVENUE, HAMDEN, CONNECTICUT 06514 ($14.00)

INSTITUTION NAME: COLSTON RESEARCH SOCIETY, BRISTOL (ENGLAND).

ACCESSION NUMBER: ED079163

CLEARINGHOUSE ACCESSION NUMBER: SE012117

PUBLICATION DATE: SEP 70

TITLE: THE ECONOMY, ENERGY, AND THE ENVIRONMENT. A BACKGROUND STUDY.

INSTITUTION CODE: FGK39700

DESCRIPTORS: *ECONOMICS; *ELECTRICITY; *ENERGY;

*ENVIRONMENT; ENVIRONMENTAL INFLUENCES; FEDERAL GOVERNMENT; FUELS; NATURAL RESOURCES; *STATE OF THE ART REVIEWS; TECHNOLOGY; UTILITIES

EDRS PRICE: EDRS PRICE MF-$0.75 HC-$6.60 PLUS POSTAGE

DESCRIPTIVE NOTE: 139P.

ISSUE: RIEAUG73

ABSTRACT: THIS STUDY SURVEYS THE EXISTING LITERATURE RELATED TO VARIOUS TECHNICAL ASPECTS OF ELECTRIC POWER PRODUCTION, WITH PRIMARY EMPHASIS ON THE SUPPLY OF THE VARIOUS FUELS USED IN THE PRODUCTION OF ELECTRICITY AND ON THE ENVIRONMENTAL CONSEQUENCES OF ENERGY CONVERSION. IT WAS PREPARED BY THE ENVIRONMENTAL POLICY DIVISION, LEGISLATIVE REFERENCE SERVICE, LIBRARY OF CONGRESS, AT THE REQUEST OF THE CONGRESSIONAL JOINT ECONOMIC COMMITTEE FOR USE AS BACKGROUND MATERIAL IN THE COMMITTEE'S INVESTIGATION OF THE ECONOMIC ASPECTS OF ELECTRIC POWER PRODUCTION. A WIDE RANGE OF ISSUES ARE IDENTIFIED AND DISCUSSED, ISSUES CLASSIFIED AS OPERATIONAL, ECONOMIC, TECHNOLOGICAL, ENVIRONMENTAL, RESOURCE, AND REGULATORY. STATISTICAL DATA AND LEGISLATIVE REFERENCES FREQUENTLY SUPPLEMENT THE NARRATIVE MATERIAL. (BL)

AVAILABILITY: SUPERINTENDENT OF DOCUMENTS, GOVERNMENT PRINTING OFFICE, WASHINGTON, D.C. 20402 ($0.55)

INSTITUTION NAME: JOINT ECONOMIC COMMITTEE, WASHINGTON, D.C.

ACCESSION NUMBER: ED075230

CLEARINGHOUSE ACCESSION NUMBER: SE015932

PUBLICATION DATE: JAN 73

TITLE: ENERGY AND THE ENVIRONMENT.

PERSONAL AUTHOR: FOWLER, J. M.; MERVINE, K. W.

INSTITUTION CODE: BBB07958

SPONSORING AGENCY CODE: BBBU1645

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; *COLLEGE SCIENCE; CURRICULUM ENRICHMENT; *ENERGY; *ENVIRONMENT; INTERDISCIPLINARY APPROACH; REFERENCE MATERIALS; *STATE OF THE ART REVIEWS

EDRS PRICE: EDRS PRICE MF-$0.75 HC-$3.15 PLUS POSTAGE

DESCRIPTIVE NOTE: 53P.

ISSUE: RIEAUG73

ABSTRACT: THIS BOOKLET IS THE FIRST IN A SERIES OF ENVIRONMENTAL RESOURCE PACKETS DESIGNED TO ENCOURAGE COLLEGE SCIENCE TEACHERS TO BECOME PROFESSIONALLY COMPETENT IN SELECTED ENVIRONMENTAL AREAS OF STUDY. PRODUCED UNDER A GRANT FROM THE ESSO EDUCATION FOUNDATION, EACH PACKET WILL CONSIST OF A REVIEW PAPER(S) AND A SELECTED AND ANNOTATED BIBLIOGRAPHY WHICH CONSIDERS NOT ONLY THE NATURAL SCIENCES BUT ALSO ECONOMICS, POLITICS, ETHICS, ETC. IN THIS PACKET DEALING WITH ENERGY AND THE ENVIRONMENT, PART ONE IS A THREE-SEGMENT PAPER WHICH STUDIES (1) ENERGY: WHERE IT COMES FROM AND WHERE IT GOES, (2) ENVIRONMENTAL EFFECTS OF ENERGY USE, AND (3) RESOURCES AND NEW SOURCES. PART TWO, WHICH CONTAINS THE ANNOTATED BIBLIOGRAPHY, COVERS BASIC GENERAL REFERENCES, ENERGY POLICY, ELECTRIC POWER, NUCLEAR POWER, FOSSIL FUELS, ENERGY RESOURCES, FUTURE SOURCES OF ENERGY, DATA, AND STUDENT READING SELECTIONS. CROSS REFERENCES ARE NOTED AT THE END OF EACH SECTION ALSO. EACH ENTRY DELINEATES THE TITLE, AUTHOR'S NAME, PUBLISHER, POINT OF VIEW, LEVEL OF USE, AND A SUMMARY OF THE CONTENTS. (BL)

INSTITUTION NAME: MARYLAND UNIV., COLLEGE PARK. DEPT. OF PHYSICS AND ASTRONOMY.

SPONSORING AGENCY NAME: ESSO EDUCATION FOUNDATION.

ACCESSION NUMBER: ED077088

CLEARINGHOUSE ACCESSION NUMBER: EA004973

PUBLICATION DATE: 6 NOV 72

TITLE: THE EVALUATION OF UNITARY & CENTRAL TYPE AIR-CONDITIONING SYSTEMS IN SELECTED FLORIDA SCHOOLS.

PERSONAL AUTHOR: BRADLEY, WILLIAM B.

INSTITUTION CODE: BBB08344; HWP20250

DESCRIPTORS: *AIR CONDITIONING EQUIPMENT; *COMPARATIVE ANALYSIS; *COMPARATIVE STATISTICS; *COST EFFECTIVENESS; ELEMENTARY SCHOOLS; ENERGY; *EQUIPMENT EVALUATION; EQUIPMENT MAINTENANCE; MERCHANDISE INFORMATION; PURCHASING; TABLES (DATA)

EDRS PRICE: EDRS PRICE MF-$0.75 HC-$1.50 PLUS POSTAGE

DESCRIPTIVE NOTE: 24P.

ISSUE: RIEOCT73

ABSTRACT: THE STUDY REPORTED HERE WAS CONDUCTED IN AN EFFORT TO OBTAIN DATA FOR COMPARING THE COMBINED OWNING AND OPERATING COSTS OF TWO DIFFERENT TYPES OF AIR-CONDITIONING SYSTEMS IN TWO ELEMENTARY SCHOOLS, BOTH SCHOOLS WERE BUILT DURING 1969-70 IN THE SAME GEOGRAPHICAL AREA ALONG THE SOUTHEAST COAST OF FLORIDA AND ARE ALSO SERVED BY THE SAME ELECTRIC UTILITY COMPANY. THEY HAVE BEEN EXPOSED TO THE SAME SEASONAL WEATHER CHANGES, BUILDING CONDITIONS, AND ECONOMIC IMPACT. SINCE THESE SCHOOLS ARE ALSO SIMILAR IN EDUCATIONAL REQUIREMENTS AND ARCHITECTURAL PLANNING, ALTHOUGH COMPLETELY DISSIMILAR IN AIR-CONDITIONING OR MECHANICAL DESIGN CONCEPTS, A BASIS WAS ESTABLISHED FOR A REALISTIC, MEANINGFUL, AND VALID COMPARISON. TO CARRY OUT THE STUDY (1) ENERGY CONSUMPTION OF EQUIPMENT WAS METERED, (2) REPLACEMENT COSTS BECAUSE OF DIFFERENCES IN LONGEVITY OF EQUIPMENT WERE ADJUSTED, (3) FIRST COSTS BECAUSE OF DIFFERENCES IN DESIGN AND OWNER REQUIREMENTS WERE ADJUSTED, (4) *MONEY COSTS* BASED ON AVAILABLE FUNDING OPTIONS OVER AN EXTENDED PERIOD OF TIME WERE CONSIDERED, AND (5) MAINTENANCE COSTS WERE APPLIED TO OPERATING COSTS. STUDY RESULTS SHOW THAT IT IS MORE ECONOMICAL TO OWN AND OPERATE THE ROOF-MOUNTED, MULTIZONED, UNITARY TYPE AIR-CONDITIONING SYSTEM THAN TO OWN AND OPERATE THE CENTRAL, CHILLED WATER, TERMINAL HEAT/REHEAT, TYPE. (AUTHOR)

AVAILABILITY: FLORIDA STATE DEPARTMENT OF EDUCATION, TALLAHASSEE, FLORIDA 32304 ($1.00)

INSTITUTION NAME: BRADLEY, WHITWORTH ASSOCIATES, INC., MIAMI, FLA.; FLORIDA STATE DEPT. OF EDUCATION, TALLAHASSEE.

ACCESSION NUMBER: ED077704

CLEARINGHOUSE ACCESSION NUMBER: SE016154

PUBLICATION DATE: APR 73

TITLE: ENERGY/ENVIRONMENT/ECONOMY. AN ANNOTATED BIBLIOGRAPHY OF SELECTED U.S. GOVERNMENT PUBLICATIONS CONCERNING UNITED STATES ENERGY POLICY.

INSTITUTION CODE: BBB08351

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; *ECONOMICS; *ENERGY; *ENVIRONMENT; FEDERAL GOVERNMENT; *GOVERNMENT PUBLICATIONS; INDEXES (LOCATERS); POLICY; REFERENCE MATERIALS

EDRS PRICE: EDRS PRICE MF-$0.75 HC-$1.50 PLUS POSTAGE

DESCRIPTIVE NOTE: 24P.

ISSUE: RIEOCT73

ABSTRACT: THIS ANNOTATED BIBLIOGRAPHY ATTEMPTS TO PROVIDE A SELECTIVE LISTING OF 109 U.S. FEDERAL GOVERNMENT PUBLICATIONS GERMANE TO THE ENERGY CRISIS AND ITS ATTENDANT ENVIRONMENTAL AND ECONOMIC IMPLICATIONS. PRIMARY EMPHASIS IS PLACED UPON DOCUMENTS PRESENTING ENERGY POLICY ISSUES WHICH HAVE EMERGED, PLUS STATISTICAL REPORTAGE WHICH PROVIDES QUANTITATIVE SUBSTANTIATION. DOCUMENTS OF A TECHNICAL NATURE ARE GENERALLY AVOIDED, ALTHOUGH SECTIONS OF SOME ITEMS INCLUDE SUCH MATERIAL. INFORMATION FOR EACH ENTRY INCLUDES TITLE OF THE PUBLICATION, SOURCE, DATE, PAGES, SUPERINTENDENT OF DOCUMENTS NUMBER OR NATIONAL TECHNICAL INFORMATION SERVICE NUMBER, PRICE, AND ANNOTATION. ITEMS FOUND IN FEDERAL DEPOSITORY LIBRARIES ARE SO NOTED. MOST OF THE ITEMS LISTED WERE ISSUED DURING THE PERIOD 1970 THROUGH THE FIRST QUARTER OF 1973, WITH A FEW EXCEPTIONS. (BL)

AVAILABILITY: ENVIRO/INFO, P. O. BOX 115, GREEN BAY, WISCONSIN 54305 ($2.00)

INSTITUTION NAME: ENVIRO/INFO, GREEN BAY, WIS.

ACCESSION NUMBER: ED078508

CLEARINGHOUSE ACCESSION NUMBER: EA005053

PUBLICATION DATE: DEC 72

TITLE: COMPUTER PROFILE OF SCHOOL FACILITIES ENERGY CONSUMPTION.

PERSONAL AUTHOR: OSWALT, FELIX E.

INSTITUTION CODE: XIE48130

DESCRIPTORS: BUDGETING; BUILDING DESIGN; BUILDING OPERATION; CLIMATE CONTROL; *COMPUTER ORIENTED PROGRAMS; COST EFFECTIVENESS; *EDUCATIONAL FACILITIES; ELECTRICAL SYSTEMS; ENERGY; *FACILITY GUIDELINES; FACILITY PLANNING; *FUEL CONSUMPTION; HEATING; *MANAGEMENT INFORMATION SYSTEMS; PREDICTIVE MEASUREMENT; SCHOOL BUILDINGS; *ENERGY CONSUMPTION; MEMPHIS; TENNESSEE

EDRS PRICE: EDRS PRICE MF-$0.75 HC-$1.50 PLUS POSTAGE

DESCRIPTIVE NOTE: 7P.

ISSUE: RIENOV73

ABSTRACT: THIS DOCUMENT OUTLINES A COMPUTERIZED MANAGEMENT TOOL DESIGNED TO ENABLE BUILDING MANAGERS TO IDENTIFY ENERGY CONSUMPTION AS RELATED TO TYPES AND USES OF SCHOOL FACILITIES FOR THE PURPOSE OF EVALUATING AND MANAGING THE OPERATION, MAINTENANCE, MODIFICATION, AND PLANNING OF NEW FACILITIES. SPECIFICALLY, IT IS EXPECTED THAT THE STATISTICS GENERATED WILL: (1) PROVIDE INFORMATION TO AID IN EVALUATING THE HUMAN ELEMENT OF OPERATING THE FACILITY, WITH REASONABLE CONSIDERATION FOR THE COST OF ENERGY CONSUMED; (2) IDENTIFY MALFUNCTIONS OF EQUIPMENT AND/OR CONTROLS THAT RESULT IN UNUSUAL CONSUMPTION OF ENERGY; (3) IDENTIFY INEFFICIENT EQUIPMENT THAT SHOULD BE MODIFIED OR REPLACED; (4) PROVIDE A COMPARATIVE EVALUATION OF DIFFERENT TYPES OF BUILDING ENCLOSURES IN TERMS OF ENERGY CONSUMED; (5) PROVIDE A COMPARATIVE EVALUATION OF DIFFERENT TYPES OF MECHANICAL SYSTEMS IN TERMS OF ENERGY CONSUMED; AND (6) PROVIDE STATISTICAL INFORMATION FOR FORECASTING ENERGY CONSUMPTION AND MANAGING BUDGETED FUNDS. (AUTHOR/DN)

INSTITUTION NAME: MEMPHIS CITY SCHOOL SYSTEM, TENN.

ACCESSION NUMBER: ED079027

CLEARINGHOUSE ACCESSION NUMBER: SE014887

PUBLICATION DATE: 71

TITLE: ENERGY: LIGHT, SOUND, AND HEAT, SCIENCE (EXPERIMENTAL): 5311.04.

PERSONAL AUTHOR: CASTALDI, JUNE P.

INSTITUTION CODE: HWP20100

DESCRIPTORS: *BEHAVIORAL OBJECTIVES; ENERGY; INSTRUCTION; INSTRUCTIONAL MATERIALS; PHYSICS; RESOURCE MATERIALS; *SECONDARY SCHOOL SCIENCE; *TEACHING GUIDES; *QUINMESTER PROGRAM

EDRS PRICE: EDRS PRICE MF-$0.75 HC-$1.50 PLUS POSTAGE

DESCRIPTIVE NOTE: 149P.; AN AUTHORIZED COURSE OF INSTRUCTION FOR THE QUINMESTER PROGRAM

ISSUE: RIENOV73

ABSTRACT: THIS UNIT OF INSTRUCTION WAS DESIGNED AS A BASIC COURSE INVOLVING THE STUDY OF LIGHT, SOUND, AND HEAT AT THE JUNIOR HIGH SCHOOL LEVEL. THE BOOKLET LISTS THE RELEVANT STATE-ADOPTED TEXTS AND STATES THE PERFORMANCE OBJECTIVES FOR THE UNIT. IT PROVIDES AN OUTLINE OF THE COURSE CONTENT AND SUGGESTS EXPERIMENTS, DEMONSTRATIONS, FIELD TRIPS, AND TOPICS FOR STUDENT PROJECTS, REPORTS, DISCUSSIONS, AND OTHER ACTIVITIES. ALSO LISTED ARE RELATED MATHEMATICS PROBLEMS, AND RELEVANT FILMS AVAILABLE FROM THE DADE COUNTY AUDIOVISUAL CENTER. REFERENCE BOOKS ARE RECOMMENDED, AND A MASTER SHEET IS PROVIDED RELATING EACH SUGGESTED ACTIVITY TO THE SPECIFIC PERFORMANCE OBJECTIVES. (JR)

INSTITUTION NAME: DADE COUNTY PUBLIC SCHOOLS, MIAMI, FLA.

ACCESSION NUMBER: ED082321

CLEARINGHOUSE ACCESSION NUMBER: EA005433

PUBLICATION DATE: 73

TITLE: THE ECONOMY OF ENERGY CONSERVATION IN EDUCATIONAL FACILITIES. A REPORT.

INSTITUTION CODE: OPA23700

DESCRIPTOR: AIR CONDITIONING EQUIPMENT; CUSTODIAN TRAINING; *ECONOMICS; *EDUCATIONAL FACILITIES; *ENERGY CONSERVATION; EQUIPMENT MAINTENANCE; FACILITY PLANNING; HEATING; LIGHTING DESIGN; *OPERATING EXPENSES; SCHOOL IMPROVEMENT; SCHOOL MAINTENANCE

EDRS PRICE: EDRS PRICE MF-$0.75 HC-$4.20 PLUS POSTAGE

DESCRIPTIVE NOTE: 85P.

ISSUE: RIFEB74

ABSTRACT: PREPARED WITH THE ASSISTANCE OF A PANEL OF EXPERTS, THIS REPORT SETS FORTH AVAILABLE INFORMATION FOR SCHOOL ARCHITECTS AND ADMINISTRATORS FACING THE ENERGY CRISIS. THE BOOKLET TELLS SPECIFICALLY HOW ECONOMIES CAN BE EFFECTED IN THE OPERATION AND MAINTENANCE OF SCHOOL BUILDINGS; IN THE MODERNIZATION OF EXISTING SCHOOLS; AND IN THE PLANNING OF FUTURE FACILITIES. SCHOOL ADMINISTRATORS ARE ADVISED TO (1) REVIEW OPERATION AND MAINTENANCE PERSONNEL TO BE SURE THAT THEY ARE QUALIFIED TO COPE WITH THE INCREASINGLY SOPHISTICATED MECHANICAL/ELECTRICAL EQUIPMENT IN SCHOOLS; (2) IDENTIFY SOURCES OF ENERGY WASTE THROUGH AN ANALYSIS OF ENERGY CONSUMPTION IN EXISTING SCHOOLS; (3) INCLUDE ENERGY CONSERVATION AS A MAJOR PART OF AN ARCHITECTURAL PROGRAM FOR BOTH MODERNIZATION AND NEW CONSTRUCTION PROJECTS; AND (4) USE LIFE-CYCLE COSTING TO REPLACE INITIAL COST AS THE SOLE BASIS FOR CONTRACT AWARDS FOR ENERGY-CONSUMING SYSTEMS. APPENDIXES PROVIDE AN EXPLANATION OF THE BASIC TECHNIQUES FOR COMPUTING LIFE-CYCLE (LONGTERM) COSTS, AND A SUMMARY OF THE BACKGROUND TO THE ENERGY CRISIS. (AUTHOR/MLF)

AVAILABILITY: EDUCATIONAL FACILITIES LABORATORIES, 477 MADISON AVENUE, NEW YORK, NEW YORK 10022 ($2.00)

INSTITUTION NAME: EDUCATIONAL FACILITIES LABS., INC., NEW YORK, N.Y.

ACCESSION NUMBER: ED082474

CLEARINGHOUSE ACCESSION NUMBER: SE016583

PUBLICATION DATE: AUG 73

TITLE: FROM SOLID WASTE TO ENERGY.

PERSONAL AUTHOR: WISELY, F. E.; AND OTHERS

DESCRIPTOR: *ENERGY; ENVIRONMENT; FUELS; *MANAGEMENT SYSTEMS; NATURAL RESOURCES; *PROJECTS; *RECYCLING; TECHNIQUES; TECHNOLOGY; UTILITIES; WASTE DISPOSAL; *WASTES

EDRS PRICE: EDRS PRICE MF-$0.75 HC-$1.50 PLUS POSTAGE

DESCRIPTIVE NOTE: 14P.; PAPER PRESENTED AT THE CONSERVATION EDUCATION ASSOCIATION CONFERENCE (MURRAY STATE UNIVERSITY, KENTUCKY, AUGUST 15, 1973)

ISSUE: RIEFEB74

ABSTRACT: A PROJECT DESIGNED TO CONVERT SOLID WASTE TO ENERGY IS EXPLAINED IN THIS PAPER. IN APRIL, 1972, AN INVESTOR-OWNED UTILITY BEGAN TO BURN MUNICIPAL SOLID WASTE AS FUEL FOR THE DIRECT PRODUCTION OF ELECTRIC POWER. THIS UNIQUE VENTURE WAS A COOPERATIVE EFFORT BETWEEN THE CITY OF ST. LOUIS, MISSOURI, AND THE UNION ELECTRIC COMPANY, WITH FINANCIAL SUPPORT FROM THE ENVIRONMENTAL PROTECTION AGENCY. IT WAS AND IS INTENDED TO DEMONSTRATE THE BENEFITS WHICH COULD ACCRUE TO A METROPOLITAN AREA BY UTILIZING THIS TECHNIQUE FOR SOLID WASTE MANAGEMENT AND THE RECOVERY OF RESOURCES. CONCEIVED UNDER THE PREMISES THAT IF RESIDENTIAL SOLID WASTE WERE PROPERLY PREPARED, AND IF IT WERE TO REPLACE ONLY A SMALL PERCENTAGE OF THE FUEL FIRED TO COAL-FIRED BOILERS, THE EFFECTS WOULD BE LITTLE, IF ANY, DIFFERENT THAN IF THE FUEL WERE ENTIRELY COAL. THE POTENTIAL BENEFITS INCLUDE AN ENVIRONMENTALLY ACCEPTABLE MEANS OF SOLID WASTE DISPOSAL, CONSERVATION OF IRREPLACEABLE NATURAL RESOURCES, MORE EFFECTIVE CONTROL OF LAND USE, AND ECONOMIC ADVANTAGES TO BOTH THE UTILITY AND THE PUBLIC. THE SCOPE, PROCESSES, AND OUTCOMES OF THE PROJECT ARE ALL DETAILED ACCOMPANIED BY DIAGRAMS, CHARTS, AND STATISTICS. (BL)

ACCESSION NUMBER: ED083019

CLEARINGHOUSE ACCESSION NUMBER: SE016840

PUBLICATION DATE: 73

TITLE: ENERGY OPTIONS FOR MAN.

PERSONAL AUTHOR: TRATNER, KAREN LEE

INSTITUTION CODE: BBB09294

DESCRIPTOR: *ENERGY; ENVIRONMENTAL INFLUENCES; KINETICS; MANUFACTURING; MECHANICS (PHYSICS); *NATURAL RESOURCES; *PRODUCTION TECHNIQUES; SOLAR RADIATION; *STATE OF THE ART REVIEWS; *TECHNOLOGY; UTILITIES

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 77P.; PRODUCED BY THE ENVIRONMENTAL EDUCATION GROUP, A PUBLIC FOUNDATION

ISSUE: RIEFEB74

ABSTRACT: PRODUCED FOR PUBLIC INTEREST, THE ENVIRONMENTAL EDUCATION GROUP HAS PREPARED THIS TWO-PART REVIEW OF THE CURRENT STATE OF ENERGY UTILIZATION, THE NATURE OF THE ENERGY CRISIS, AND APPROACHES TO ENERGY PRODUCTION. THE MAJOR SECTION IS A PRESENTATION OF ALTERNATIVE SOURCES OF ENERGY THAT ARE NEGLECTED AMS OF POSSIBLE AID IN THE NEAR FUTURE, OR ARE MODIFICATIONS OF CURRENT ENERGY SOURCES. ALSO, IT ENDEAVORS TO ANALYZE EACH ALTERNATIVE WITH RESPECT TO ECONOMIC FEASIBILITY AND ENVIRONMENTAL IMPACT. THE OPTIONS CONSIDERED ARE: WATER POWER, WIND POWER, GEOTHERMAL POWER, USE OF WASTE AND GARBAGE FOR ENERGY, COAL, PETROLEUM, NATURAL GAS, NUCLEAR ENERGY IN THE FORM OF FISSION POWER, BREEDER REACTORS, FUSION POWER, DEVICES AND METHODS FOR MORE EFFICIENT ENERGY CONVERSION (THERMIONIC, THERMOELECTRIC, PHOTOELECTRIC, FUEL CELL, MAGNETOHYDRODYNAMICS, ROCKET ENGINE, SPECIAL BATTERY, SUPERCONDUCTIVITY, AND POWER, GAS AND COMBINED CYCLES), CONSERVATION OF ENERGY, AND LOW ENERGY OPTIONS. THE SECOND PART IS AN IN-DEPTH OBSERVATION OF TWO IMPORTANT SOURCES OF RENEWABLE ENERGY--HYDROGEN AND SOLAR ENERGY--WHICH, IN ADDITION TO FUSION POWER (AS YET NOT COMMERCIALLY OR TECHNICALLY HARNESSED), HOLD THE MOST HOPE OF OFFERING TOTAL ECONOMIES THAT WILL BE SELF-SUFFICIENT AND WILL HOLD POLLUTION IN CHECK. (BL)

AVAILABILITY: ENVIRONMENTAL ALERT GROUP, 1543 NORTH MARTEL AVENUE, LOS ANGELES, CALIFORNIA 90046 (FREE)

INSTITUTION NAME: ENVIRONMENTAL ALERT GROUP, LOS ANGELES, CALIF.

ACCESSION NUMBER: ED083674

CLEARINGHOUSE ACCESSION NUMBER: EA005510

PUBLICATION DATE: 73

TITLE: COST AND ENERGY SAVINGS OPPORTUNITIES WITH HEATING, AIR CONDITIONING AND LIGHTING SYSTEMS IN SCHOOLS.

INSTITUTION CODE: BBB09415

DESCRIPTOR: *AIR CONDITIONING; CHECK LISTS; CONSERVATION (CONCEPT); *COST EFFECTIVENESS; EDUCATIONAL FACILITIES; *ENERGY; *HEATING; *LIGHTING; SCHOOL IMPROVEMENT

EDRS PRICE: EDRS PRICE MF-$0.75 HC-$1.50 PLUS POSTAGE

DESCRIPTIVE NOTE: 12P.

ISSUE: RIEMAR74

ABSTRACT: GREAT POTENTIAL EXISTS FOR SAVING ENERGY AND OPERATING COSTS WITH A WIDE VARIETY OF HEAT CONSERVATION SYSTEMS. TWO MAJOR ELECTRIC SERVICES--SPACE CONDITIONING AND LIGHTING--AFFORD COST AND ENERGY SAVINGS OPPORTUNITIES. THESE SERVICES ARE DETAILED IN CHECKLIST FASHION IN THIS BROCHURE, WITH THE SUGGESTIONS INCLUDED UNDER SPACE CONDITIONING GENERALLY APPLICABLE TO ALL TYPE OF SYSTEMS--ELECTRIC, GAS, OR OIL. ELECTRIC SPACE CONDITIONING AND LIGHTING CONCEPTS ARE REVIEWED, WITH DISCUSSIONS BEING PERTINENT TO NEW CONSTRUCTION AND MODERNIZATION ACTIVITIES. (PHOTOGRAPHS MAY REPRODUCE POORLY.) (AUTHOR/MLF)

AVAILABILITY: ELECTRIC ENERGY ASSOCIATION, 90 PARK AVENUE, NEW YORK, NEW YORK 10016 (SINGLE COPIES FREE, MULTIPLE COPIES $.65 EACH)

INSTITUTION NAME: ELECTRIC ENERGY ASSOCIATION, NEW YORK, N.Y.

ACCESSION NUMBER: ED085316

CLEARINGHOUSE ACCESSION NUMBER: SO006746

PUBLICATION DATE: 73

TITLE: ENERGY CRISIS. TEACHING RESOURCES. A SPECIAL PUBLICATION SUGGESTING SCHOOL ACTIVITIES WHICH STRESS INDIVIDUAL RESPONSIBILITY TOWARDS ENERGY CRISIS PROBLEMS.

PERSONAL AUTHOR: CURRY, WENDELL; AND OTHERS

INSTITUTION CODE: BBB02126

DESCRIPTOR: CLASS ACTIVITIES; *CONSERVATION EDUCATION; *CONSUMER EDUCATION; ELEMENTARY EDUCATION; *ENERGY; HIGHER EDUCATION; INSTRUCTIONAL MATERIALS; INTERDISCIPLINARY APPROACH; KINDERGARTEN; LEARNING ACTIVITIES; LESSON PLANS; MATHEMATICS; NATURAL RESOURCES; RESOURCE GUIDES; SCIENCES; SECONDARY EDUCATION; SOCIAL STUDIES; TEACHING GUIDES

EDRS PRICE: EDRS PRICE MF-$0.75 HC-$3.15 PLUS POSTAGE

DESCRIPTIVE NOTE: 59P.

ISSUE: RIEAPR74

ABSTRACT: THIS HANDBOOK PROVIDES PUBLIC SCHOOL TEACHERS AND ADMINISTRATORS OF OREGON WITH TEACHING IDEAS AND INFORMATION ABOUT THE ENERGY CRISIS. SUGGESTED ACTIVITIES ARE INTENDED TO INFORM STUDENTS (KINDERGARTEN THROUGH COMMUNITY COLLEGE) ABOUT THEIR RESPONSIBILITY TOWARD THE ENERGY CRISIS AND TO MOTIVATE ENERGY CONSERVATION. THE HANDBOOK IS DIVIDED INTO FOUR SECTIONS. SECTION I GIVES BACKGROUND INFORMATION ON THE ENERGY CRISIS, WITH EMPHASIS ON ENERGY IN THE PACIFIC NORTHWEST. SAMPLE LESSON PLANS IN ENERGY CONSERVATION ARE

OUTLINED IN SECTION II. MOST PLANS ARE INTERDISCIPLINARY WITH EMPHASIS ON MATH, SCIENCE, AND SOCIAL STUDIES. SECTIONS III AND IV SUGGEST ALL-SCHOOL ACTIVITIES AND HOME ACTIVITIES FOR ENERGY CONSERVATION. A RESOURCE LIST OF ENERGY CRISIS SPEAKERS IN OREGON IS PROVIDED, AS WELL AS CHECKLISTS FOR ENERGY CONSERVATION IN HOMES AND SCHOOL BUILDINGS. A GLOSSARY OF TERMS AND A REFERENCE READING LIST ARE INCLUDED IN THE APPENDICES. (AUTHOR/RM)

INSTITUTION NAME: OREGON STATE BOARD OF EDUCATION, SALEM.

ACCESSION NUMBER: ED086075

CLEARINGHOUSE ACCESSION NUMBER: HE004970

PUBLICATION DATE: 74

TITLE: ENERGY CONSERVATION CHECKLIST FOR UNIVERSITIES AND COLLEGES.

INSTITUTION CODE: BBB07734

DESCRIPTOR: *CONSERVATION EDUCATION; EDUCATIONAL FINANCE; *ENERGY; *ENVIRONMENTAL RESEARCH; *HIGHER EDUCATION; *NATURAL RESOURCES

EDRS PRICE: EDRS PRICE MF-$0.75 HC-$1.50 PLUS POSTAGE

DESCRIPTIVE NOTE: 24P.

ISSUE: RIEMAY74

ABSTRACT: SEVERAL SPECIFIC SUCCESS STORIES ARE INCLUDED HERE FROM INSTITUTIONS THAT HAVE HAD ENERGY CONSERVATION PROGRAMS LONG ENOUGH TO ESTABLISH MEANINGFUL STATISTICS. THEY ILLUSTRATE WHY IT IS NOT UNREASONABLE FOR MOST INSTITUTIONS TO MEET THE FEDERAL OBJECTIVE OF A 15% REDUCTION IN ENERGY CONSUMPTION, EVEN IF 1973 IS USED AS THE BASE YEAR, BUT WITH SOME ALLOWANCE MADE FOR NEW SPACE ADDED THAT YEAR. A COMPREHENSIVE LIST OF SUGGESTIONS PRIMARILY TAKEN FROM EXISTING PROGRAMS AT APPROXIMATELY 35 INSTITUTIONS IS SUGGESTED AS A CROSS-FERTILIZATION OF ENERGY CONSERVATION IDEAS. OTHER IDEAS SOLICITED FROM FEDERAL AGENCIES, UTILITY ASSOCIATIONS AND PRIVATE INDUSTRY ARE INCLUDED. THE SUGGESTIONS ARE CATEGORIZED BROADLY. THERE IS NO ATTEMPT TO SEPARATE THE DESIGN/CONSTRUCT IDEAS FROM THOSE THAT CAN BE APPLIED WITH LITTLE OR NO CAPITAL OUTLAY THROUGH BUDGETED OPERATING FUNDS. (AUTHOR)

AVAILABILITY: APPA, SUITE 510, 1 DUPONT CIRCLE, WASHINGTON, D.C. 20036 ($1.50)

INSTITUTION NAME: ASSOCIATION OF PHYSICAL PLANT ADMINISTRATORS OF UNIVERSITIES AND COLLEGES, WASHINGTON, D.C.

ACCESSION NUMBER: ED086467

CLEARINGHOUSE ACCESSION NUMBER: SE015793

PUBLICATION DATE: 72

TITLE: A STUDY OF THE RELATIONSHIPS BETWEEN SELECTED TEACHER AFFECTIVE CHARACTERISTICS AND STUDENT LEARNING OUTCOMES IN A JUNIOR HIGH SCHOOL SCIENCE PROGRAM.

PERSONAL AUTHOR: STEVENS, JOHN TRUMAN

DESCRIPTOR: *ACHIEVEMENT; AFFECTIVE BEHAVIOR; COGNITIVE MEASUREMENT; DOCTORAL THESES; EDUCATIONAL RESEARCH; *INSTRUCTION; *PERSONALITY STUDIES; SCIENCE EDUCATION; *SECONDARY SCHOOL SCIENCE; STUDENT BEHAVIOR; TEACHER ATTITUDES; *TEACHER CHARACTERISTICS; TIME; INTERACTION OF MATTER AND ENERGY; RESEARCH REPORTS

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 208P.; ED.D. DISSERTATION, UNIVERSITY OF VIRGINIA

ISSUE: RIEMAY74

ABSTRACT: REPORTED IS A STUDY OF POSSIBLE RELATIONSHIPS BETWEEN SELECTED TEACHER CHARACTERISTICS AND TEACHER EFFECTIVENESS IN THE TEACHING OF JUNIOR HIGH SCHOOL SCIENCE, INTERACTION OF MATTER AND ENERGY (TIME). THIRTY-TWO TEACHERS AND THE STUDENTS FROM EIGHT SCHOOLS PARTICIPATED IN THE STUDY. TEACHER DATA WERE COLLECTED BY MEANS OF: (1) ROKEACH DOGMATISM SCALE, FORM E; (2) STUDY OF VALUES; (3) EDWARD'S PERSONALITY INVENTORY, FORM IA; (4) EDUCATION SCALE VII; AND (5) SCIENCE SUPPORT SCALE. STUDENT DATA WERE PROVIDED BY: (1) AN IMS ACHIEVEMENT TEST; (2) TEST OF SCIENCE PROCESSES; (3) CRITICAL THINKING APPRAISAL, FORM YM; (4) SCIENTIFIC ATTITUDE INVENTORY; AND (5) SCIENCE INTEREST INVENTORY (CONSTRUCTED BY INVESTIGATOR). PRE- AND POSTTESTS WERE ADMINISTERED. THE SELECTED VARIABLES FROM TEACHER INSTRUMENTS WERE USED TO PREDICT STUDENT GAIN SCORES. THE SIMPLE AND MULTIPLE LINEAR REGRESSION TECHNIQUES WERE USED (.05 LEVEL OF SIGNIFICANCE) TO TEST THE HYPOTHESES. THE FINDINGS DID NOT OFFER SUFFICIENT EVIDENCE FOR MAKING DECISIONS CONCERNING TEACHER EFFECTIVENESS ON THE BASIS OF THE TEACHER AFFECTIVE CHARACTERISTICS EXAMINED. POSITIVE RELATIONSHIPS WERE FOUND AMONG THE GAIN SCORES OF SOME AREAS OF COGNITIVE LEARNING AND IN SOME AREAS OF AFFECTIVE LEARNING. NONE WERE FOUND IN COGNITIVE OR AFFECTIVE LEARNING OUTCOMES. (AUTHOR/EB)

AVAILABILITY: UNIVERSITY MICROFILMS, 300 NORTH ZEEB ROAD, ANN ARBOR, MICHIGAN 48106 (ORDER NO. 72-33,259 MICROFILM-$4.00, XEROGRAPHY-$10.00)

ACCESSION NUMBER: ED087670

CLEARINGHOUSE ACCESSION NUMBER: SO006927

PUBLICATION DATE: 10 DEC 73

TITLE: CRISIS PAPER NO. 33. THE ENERGY CRISIS.

INSTITUTION CODE: BBB04020

DESCRIPTOR: COURSE CONTENT; CURRENT EVENTS; ECONOMIC CLIMATE; *ENERGY; ENVIRONMENTAL EDUCATION; FOREIGN RELATIONS; *INTERNATIONAL EDUCATION; *NATURAL RESOURCES; NEWSPAPERS; POLITICAL ISSUES; *PRESS OPINION; RESOURCE MATERIALS; SECONDARY EDUCATION; *SOCIAL STUDIES; WORLD AFFAIRS

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 23P.

ISSUE: RIEJUN74

ABSTRACT: THIS CRISIS PAPER IS THIRTY-THIRD IN A SERIES WHICH EXPANDS THE ANALYSIS OF THE CRISIS UNDER DISCUSSION TO PROVIDE A MULTI-NATIONAL VIEW OF THE ISSUE BY QUOTING COMMENT FROM A SELECTION OF NEWSPAPERS AND JOURNALS OF SEVERAL COUNTRIES. A BRIEF INTRODUCTION OUTLINES THE HISTORY AND BACKGROUND OF THE ENERGY CRISIS, EMPHASIZING THE UNDERESTIMATED DEMAND FOR OIL AND THE OVERESTIMATED AMOUNT OF ACCESSIBLE OIL OUTSIDE THE MIDDLE EAST. JOURNAL AND NEWSPAPER ARTICLES FROM SIX COUNTRIES--UNITED STATES, FRANCE, WEST GERMANY, JAPAN, EGYPT, AND UNITED KINGDOM--FOLLOW, RANGING IN DATE FROM APRIL TO NOVEMBER 1973. A TWO-PAGE COMMENTARY UNDERLINES MAJOR PROBLEMS BROUGHT OUT IN THE ARTICLES AND SUMMARIZES THE POLITICAL AND ECONOMIC IMPLICATIONS WHICH ARE ANALYZED IN THE COMMENTS. A LIST OF FOUR BASIC POLICY QUESTIONS IMPLICIT IN THE ENERGY CRISIS CONCLUDE THE ISSUE. (AUTHOR/KSM)

AVAILABILITY: ATLANTIC EDUCATIONAL PUBLICATIONS, 23/25 ABBEY HOUSE, 8 VICTORIA ST., LONDON, SW 1H 0LA (£1.75 FOR SINGLE COPIES, $3.55 FOR 12 OR MORE COPIES; SUBSCRIPTION FOR SEVEN CONSECUTIVE ISSUES $4.50)

INSTITUTION NAME: ATLANTIC INFORMATION CENTRE FOR TEACHERS, LONDON (ENGLAND).

ACCESSION NUMBER: ED088181

CLEARINGHOUSE ACCESSION NUMBER: EA005914

PUBLICATION DATE: JAN 74

TITLE: CONSUMPTION OF ENERGY IN NEW YORK STATE: 1972 (WITH ESTIMATES FOR 1973).

PERSONAL AUTHOR: HAUSGAARD, OLAF

INSTITUTION CODE: BB810023

DESCRIPTOR: DEPLETED RESOURCES; ECONOMIC RESEARCH; *ENERGY CONSERVATION; *FUEL CONSUMPTION; INDUSTRY; MEASUREMENT; *NATURAL RESOURCES; PETROLEUM INDUSTRY; PREDICTION; *RESOURCE ALLOCATIONS; *TABLES (DATA); TRANSPORTATION; USE STUDIES; UTILITIES; WATER RESOURCES; NEW YORK STATE

EDRS PRICE: EDRS PRICE MF-$0.75 HC-$1.85 PLUS POSTAGE

DESCRIPTIVE NOTE: 32P.; PUBLISHED AS A SUPPLEMENT TO O.E.R. NO. 10. REPLACES O.E.R. NO. 15

ISSUE: RIEJUL74

ABSTRACT: THIS REPORT CONTAINS TABULAR DATA ON ENERGY CONSUMPTION FOR THE CALENDAR YEAR 1972 AND A FORECAST OF NATURAL GAS REQUIREMENTS FOR THE PERIOD 1973 TO 1976. BROAD SECTOR CATEGORIES USED IN THE TABLES ARE ELECTRIC UTILITIES, RESIDENTIAL, COMMERCIAL, INDUSTRIAL, AND TRANSPORTATION. TABLES SHOW ENERGY CONSUMPTION BY PRIMARY SOURCE AND MAJOR SECTOR FOR THE YEARS 1960, 1965, 1970, 1971, 1972, AND 1973 ESTIMATES. THE ENERGY CONSUMPTION IS MEASURED IN TRILLION BRITISH THERMAL UNITS (T-BTU). CONSUMPTION OF FOSSIL FUELS BY SECTOR IS SHOWN FOR 1972, AND IS ESTIMATED FOR 1973 IN UNITS OF TONS OF COAL, THOUSANDS OF BARRELS OF PETROLEUM, AND MILLION CUBIC FEET OF NATURAL GAS. SUMMARY CONSUMPTION TABLES BY SECTOR ARE PROVIDED IN THE APPENDIXES. (MLF)

REPORT NUMBER: OER-R-19

INSTITUTION NAME: NEW YORK STATE PUBLIC SERVICE COMMISSION, ALBANY. OFFICE OF ECONOMIC RESEARCH.

ACCESSION NUMBER: ED088183

CLEARINGHOUSE ACCESSION NUMBER: EA005916

PUBLICATION DATE: 7 MAR 73

TITLE: REPORT OF AD HOC COMMITTEE ON ENERGY EFFICIENCY IN LARGE BUILDINGS TO THE INTERDEPARTMENTAL FUEL AND ENERGY COMMITTEE OF THE STATE OF NEW YORK.

INSTITUTION CODE: BB810024

DESCRIPTOR: AIR CONDITIONING EQUIPMENT; *ARCHITECTURAL PROGRAMING; *BUILDING DESIGN; BUILDING MATERIALS; BUILDING OPERATION; BUILDINGS; CONTROLLED ENVIRONMENT; COST EFFECTIVENESS; *ENERGY CONSERVATION; *FACILITY GUIDELINES; *FUEL CONSUMPTION; HEATING; LIGHTING DESIGN; MAINTENANCE; STANDARDS; VENTILATION; HEAT RECOVERY SYSTEMS; NEW YORK STATE

EDRS PRICE: EDRS PRICE MF-$0.75 HC-$10.20 PLUS POSTAGE

DESCRIPTIVE NOTE: 213P.; RELATED DOCUMENTS ARE EA 005 917-918

ISSUE: RIEJUL74

ABSTRACT: UNWARRANTED AMOUNTS OF ENERGY ARE WASTED EACH YEAR IN PROVIDING MAJOR PUBLIC AND PRIVATELY OWNED BUILDINGS AND THE DESIRED ENVIRONMENT WITHIN THEM. IMPROVED DESIGN, CONSTRUCTION, AND MAINTENANCE AND OPERATION CAN SAVE SIGNIFICANT AMOUNTS OF ENERGY WITHOUT IMPAIRMENT OF THESE PROCESSES THROUGHOUT THE LIFE CYCLE OF THESE BUILDINGS, ARBITRARILY ESTABLISHED AS 50 YEARS. TO SUCCESSFULLY ATTAIN THIS ENERGY CONSERVATION, INCREASED COOPERATION AND COORDINATION AMONG OWNERS, DESIGNERS, CONTRACTORS, MAINTENANCE AND OPERATION PERSONNEL, LABOR, AND GOVERNMENTAL AGENCIES WILL BE NECESSARY. IMPLEMENTING ALL OF THE RECOMMENDATIONS CONTAINED IN THIS REPORT DURING THE LIFE CYCLE OF A LARGE BUILDING SHOULD RESULT IN A REDUCTION IN ENERGY CONSUMPTION OF MORE THAN 50 PERCENT. THEREFORE, THERE IS GREAT POTENTIAL FOR ENERGY CONSERVATION IN LARGE

BUILDINGS, WITH THE ACCOMPANYING SIGNIFICANT BENEFIT OF DOLLAR SAVINGS. THIS REPORT CONSISTS OF A BROAD SUMMARY AND OVERVIEW OF THE ENERGY CONSERVATION ASPECTS OF LARGE BUILDINGS, FOLLOWED BY THREE SUBCOMMITTEE REPORTS CONTAINING DETAILED STUDIES AND GUIDELINE RECOMMENDATIONS IN THE THREE AREAS OF DESIGN, CONSTRUCTION, AND MAINTENANCE AND OPERATION. A BIBLIOGRAPHY IS PROVIDED. (AUTHOR)

INSTITUTION NAME: NEW YORK STATE INTERDEPARTMENTAL FUEL AND ENERGY COMMITTEE, ALBANY.

ACCESSION NUMBER: ED088114

CLEARINGHOUSE ACCESSION NUMBER: EA005917

PUBLICATION DATE: 25 JUN 73

TITLE: REPORT OF AD HOC COMMITTEE ON APPLIANCE AND APPARATUS EFFICIENCY TO THE INTERDEPARTMENTAL FUEL AND ENERGY COMMITTEE OF THE STATE OF NEW YORK. FINAL REPORT.

INSTITUTION CODE: BBB16024

DESCRIPTOR: *CONSUMER ECONOMICS; CONSUMER EDUCATION; COST EFFECTIVENESS; *EFFICIENCY; *ELECTRICAL APPLIANCES; *ENERGY CONSERVATION; EQUIPMENT EVALUATION; *EQUIPMENT STANDARDS; FUEL CONSUMPTION; MECHANICAL EQUIPMENT; PERFORMANCE SPECIFICATIONS; UTILITIES; NEW YORK STATE

EDRS PRICE: EDRS PRICE MF-$0.75 HC-$15.00 PLUS POSTAGE

DESCRIPTIVE NOTE: 319P.; RELATED DOCUMENTS ARE EA 005 916 AND EA 005 918

ISSUE: RIEJUL74

ABSTRACT: HIGH AND WASTEFUL ENERGY CONSUMPTION PRACTICES HAVE BECOME A PART OF THE AMERICAN LIFE STYLE. THE UNITED STATES, WITH SIX PERCENT OF THE WORLD'S POPULATION, IS RESPONSIBLE FOR 33 PERCENT OF THE WORLD'S ENERGY CONSUMPTION. AMERICANS ARE NOW FACED WITH SHORTAGES OF PRIMARY FUELS, ESPECIALLY NATURAL GAS AND OIL, AND WITH STRINGENCY OF ELECTRIC POWER CAPACITY. TO UTILIZE ENERGY IN NEW YORK STATE MORE EFFICIENTLY, A VIGOROUS PROGRAM OF ENERGY CONSERVATION SHOULD BE PURSUED. IN PARTICULAR, THE PEOPLE OF THE STATE SHOULD BE CONVINCED THAT CONSERVING ENERGY IS THEIR RESPONSIBILITY, IN THE INTEREST OF EDUCATING ENERGY CONSUMERS AS TO WHAT THEY CAN DO AND HOW THE ENERGY UTILIZATION OF APPLIANCES AND RECOMMENDS THE APPARATUS TO BE USED AND SOME STEPS TO BE TAKEN TO IMPROVE ENERGY UTILIZATION. (PAGES 149-150 MAY REPRODUCE POORLY.) (AUTHOR)

INSTITUTION NAME: NEW YORK STATE INTERDEPARTMENTAL FUEL AND ENERGY COMMITTEE, ALBANY.

ACCESSION NUMBER: ED088185

CLEARINGHOUSE ACCESSION NUMBER: EA005918

PUBLICATION DATE: 31 OCT 73

TITLE: REPORT OF AD HOC COMMITTEE ON ENERGY EFFICIENCY IN TRANSPORTATION TO THE INTERDEPARTMENTAL FUEL AND ENERGY COMMITTEE OF THE STATE OF NEW YORK. INTERIM REPORT.

INSTITUTION CODE: BBB16024

DESCRIPTOR: CLOSED CIRCUIT TELEVISION; *CONSERVATION EDUCATION; *EFFICIENCY; *ENERGY CONSERVATION; *FUEL CONSUMPTION; LAND USE; PERFORMANCE SPECIFICATIONS; STANDARDS; STATE ACTION; *TRANSPORTATION; NEW YORK STATE; PUBLIC TRANSPORTATION

EDRS PRICE: EDRS PRICE MF-$0.75 HC-$5.40 PLUS POSTAGE

DESCRIPTIVE NOTE: 106P.; RELATED DOCUMENTS ARE EA 005 916-917

ISSUE: RIEJUL74

ABSTRACT: AFTER PRESENTING THE BACKGROUND OF THE AVAILABILITY OF FUEL FOR TRANSPORTATION AND THE INCREASING PER CAPITA ENERGY CONSUMPTION, THE REPORT EXAMINES THE STATE'S ROLE IN ENERGY CONSERVATION. FIVE PROPOSALS ARE OUTLINED: (1) A COORDINATED EDUCATION PROGRAM DESIGNED TO INCREASE PUBLIC AWARENESS OF THE CURRENT ENERGY SITUATION; (2) A PILOT PROGRAM OF MEASURING FUEL SAVINGS THAT MIGHT BE REALIZED THROUGH THE USE OF RADIAL TIRES IN THE STATE MOTOR VEHICLE FLEET; (3) A REDIRECTION OF STATE EMPLOYEE TRAVEL HABITS AND PATTERNS; (4) A DETERMINATION OF WHETHER THE PROVISION OF HIGH SPEED RAIL SERVICE OPERATING IN THE ALBANY TO NEW YORK CITY CORRIDOR WOULD CONTRIBUTE TO FUEL CONSERVATION; AND (5) THE ESTABLISHMENT OF A CLOSED-CIRCUIT TELECOMMUNICATIONS SYSTEM BETWEEN NEW YORK CITY AND ALBANY AS A ONE-YEAR PILOT PROGRAM TO CONSERVE ENERGY BY REDUCING THE NUMBER OF AUTOMOBILE TRIPS BETWEEN THESE CITIES. (AUTHOR/MLF)

INSTITUTION NAME: NEW YORK STATE INTERDEPARTMENTAL FUEL AND ENERGY COMMITTEE, ALBANY.

ACCESSION NUMBER: ED088203

CLEARINGHOUSE ACCESSION NUMBER: EA005937

PUBLICATION DATE: 73

TITLE: SCHOOLS AND THE ENERGY CRISIS. A RESEARCH REPORT.

INSTITUTION CODE: JIM57240

DESCRIPTOR: BOARDS OF EDUCATION; *ENERGY CONSERVATION; FUEL CONSUMPTION; *NATIONAL SURVEYS; *PROBLEMS; RESEARCH; *STATE ACTION; STATE SCHOOL DISTRICT RELATIONSHIP; *ENERGY CRISIS

EDRS PRICE: EDRS PRICE MF-$0.75 HC-$1.85 PLUS POSTAGE

DESCRIPTIVE NOTE: 49P.

ISSUE: RIEJUL74

ABSTRACT: THIS REPORT SUMMARIZES INFORMATION FROM 43 STATES AND FROM THE DISTRICT OF COLUMBIA AND PUERTO RICO; AND FROM 55 LOCAL SCHOOL DISTRICTS. THE MAJORITY OF THE INFORMATION IN THE REPORT WAS PROVIDED BY STATE SCHOOL BOARDS ASSOCIATIONS AND NSBA DIRECT AFFILIATE DISTRICTS. SURVEY RESULTS INDICATE THAT (1) NATIONWIDE, AT BOTH THE STATE AND SCHOOL DISTRICT LEVELS, SCHOOLS HAVE BEEN COOPERATIVE WITH REQUESTS TO CONSTRAIN ENERGY USE AND WILLING TO INSTITUTE VOLUNTARY MEASURES TO CONSERVE ENERGY; (2) THE ENERGY CRISIS HAS HAD DIFFERENT EFFECTS ON SCHOOLS IN DIFFERENT REGIONS OF THE COUNTRY, AND SHORTAGES OF FUEL FOR BUSES (AND ESCALATING PRICES FOR AVAILABLE FUEL) ARE NATIONWIDE; (3) WITH FEW EXCEPTIONS, THE EMPHASIS IN SCHOOLS HAS BEEN ON DEVELOPING SHORT-RANGE METHODS TO COPE WITH FUEL SHORTAGES; AND (4) MORE OFTEN THAN NOT, RESPONDENTS DISCUSSED ENERGY CONSERVATION MEASURES, BUT FAILED TO DISCUSS THE CHARACTER OF ACTUAL ENERGY SHORTAGES. STATE SCHOOL BOARDS ASSOCIATION RESPONSES TO THE ENERGY CRISIS VARY. A FEW EXERCISE ACTIVE STATE LEADERSHIP (NEBRASKA AND NEW JERSEY); MOST ARE COOPERATING WITH THE STATE GOVERNMENT AGENCIES (IOWA AND MICHIGAN); SOME HAVE CHOSEN ONLY TO KEEP AWARE OF THE STATE SITUATION (ALABAMA AND NEVADA). (AUTHOR/EA)

REPORT NUMBER: NSBA-1973-3

AVAILABILITY: NATIONAL SCHOOL BOARDS ASSOCIATION, 800 STATE NATIONAL BANK PLAZA, EVANSTON, ILLINOIS 60201 ($1.50, QUANTITY DISCOUNTS)

INSTITUTION NAME: NATIONAL SCHOOL BOARDS ASSOCIATION, EVANSTON, ILL.

ACCESSION NUMBER: ED088258

CLEARINGHOUSE ACCESSION NUMBER: EC061375

TITLE: ENERGY CONSERVATION AND MENTALLY RETARDED CITIZENS.

PERSONAL AUTHOR: FOGELMAN, CHARLES J.; AND OTHERS

INSTITUTION CODE: FGK01623

DESCRIPTOR: *ENERGY CONSERVATION; ENVIRONMENTAL INFLUENCES; *EXCEPTIONAL CHILD EDUCATION; *GUIDELINES; *INSTITUTIONALIZED (PERSONS); *MENTALLY HANDICAPPED

EDRS PRICE: EDRS PRICE MF-$0.75 HC-$1.50 PLUS POSTAGE

DESCRIPTIVE NOTE: 4P.

ISSUE: RIEJUL74

ABSTRACT: SUGGESTED ARE SOME PRINCIPLES OF DEVELOPING ENERGY CONSERVATION PROGRAMS WHERE RETARDED PERSONS MIGHT BE PARTICULARLY AFFECTED, WAYS TO CONSERVE ENERGY, AND PERTINENT REFERENCES. IT IS THOUGHT THAT THE RETARDED, PARTICULARLY THE RETARDED IN INSTITUTIONS, ARE MORE LIKELY TO SUFFER FROM ENERGY CONSERVATION MEASURES THAN MEMBERS OF THE LARGER POPULATION. AMONG PRINCIPLES STATED IS THE NECESSITY TO ASSESS PROGRAMATIC NEEDS, MEDICAL NEEDS, AND THE USUAL ACTIVITY LEVEL OF THE RETARDED PERSON(S) BEING SERVED. WAYS TO CONSERVE ENERGY ARE GIVEN SUCH AS ASSIGNING A TEAM OF A RETARDED PERSON AND A STAFF MEMBER TO MONITOR SIMPLE ENERGY CONSERVATION MEASURES OF CHECKING THERMOSTAT SETTINGS AND LIGHT SWITCHES. NINE BOOKS, GUIDELINES, OR OTHER SOURCES OF INFORMATION ARE GIVEN (ADDRESSES ARE INCLUDED). (MC)

INSTITUTION NAME: AMERICAN ASSOCIATION ON MENTAL DEFICIENCY, WASHINGTON, D.C.

ACCESSION NUMBER: ED088719

CLEARINGHOUSE ACCESSION NUMBER: SE017547

PUBLICATION DATE: 19 APR 74

TITLE: SCIENCE, VOLUME 184 NUMBER 4134. ENERGY.

PERSONAL AUTHOR: ABELSON, PHILIP H., ED.

INSTITUTION CODE: FGK01540

DESCRIPTOR: ECONOMIC FACTORS; *ENERGY; ENERGY CONSERVATION; *ENVIRONMENTAL EDUCATION; *POLICY; SCIENCE EDUCATION; SOLAR RADIATION; *TECHNOLOGICAL ADVANCEMENT; TECHNOLOGY; *ENERGY CRISIS

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 185P.

ISSUE: RIEJUL74

ABSTRACT: THIS ENTIRE ISSUE OF THE "SCIENCE" JOURNAL IS DEVOTED TO THE TOPIC OF ENERGY AND ISSUES RELATING TO THE ENERGY CRISIS. ITS CONTENT WAS CHOSEN TO PRESENT MATERIAL RELEVANT TO IMPORTANT PUBLIC DECISIONS OF THE NEXT FEW YEARS. TWENTY-SIX ARTICLES COVER A WIDE RANGE OF TOPICS, INCLUDING THE IMPACT OF THE ENERGY CRISIS ON PEOPLE AND INSTITUTIONS; STATE AND FEDERAL POLICIES; ECONOMICS; THE DEVELOPED TECHNOLOGIES RELATING TO OIL, COAL, GAS, AND URANIUM, AND THE DEVELOPING TECHNOLOGY FOR UTILIZING GEOTHERMAL AND SOLAR ENERGY. CERTAIN TOPICS RELEVANT TO THE SUBJECT MATTER OF THIS ISSUE OF "SCIENCE" WERE OMITTED BECAUSE THEY HAD ALREADY BEEN TREATED IN RECENT ISSUES OF THE JOURNAL. THESE ARTICLES, TOGETHER WITH THEIR DATES OF PUBLICATION, ARE LISTED IN A BIBLIOGRAPHY OF ENERGY. (JR)

AVAILABILITY: AAAS, 1515 MASSACHUSETTS AVENUE N.W., WASHINGTON, D.C. 20005 ($1.00 SINGLE ISSUE)

JOURNAL CITATION: SCIENCE; V184 N4134 APR 74

INSTITUTION NAME: AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE, WASHINGTON, D.C.

ACCESSION NUMBER: ED089946

CLEARINGHOUSE ACCESSION NUMBER: SE016841

PUBLICATION DATE: SEP 73

TITLE: ENERGY/ENVIRONMENT/ECONOMY. AN ANNOTATED BIBLIOGRAPHY OF SELECTED U.S. GOVERNMENT PUBLICATIONS CONCERNING UNITED STATES ENERGY POLICY. SUPPLEMENT.

INSTITUTION CODE: BBB08351

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; *ECONOMICS; *ENERGY; *ENVIRONMENT; FEDERAL GOVERNMENT; *GOVERNMENT PUBLICATIONS; INDEXES (LOCATORS); POLICY; REFERENCE MATERIALS

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 25P.

ISSUE: RIEAUG74

ABSTRACT: THIS ANNOTATED BIBLIOGRAPHY SUPPLEMENTS ED 077 704. IT PROVIDES A SELECTIVE LISTING OF 93 U.S. FEDERAL GOVERNMENT PUBLICATIONS GERMANE TO THE ENERGY CRISIS AND ITS ATTENDANT ENVIRONMENTAL AND ECONOMIC IMPLICATIONS. PRIMARY EMPHASIS IS PLACED UPON DOCUMENTS PRESENTING ENERGY POLICY ISSUES WHICH HAVE EMERGED; PLUS STATISTICAL REPORTAGE WHICH PROVIDES QUANTITATIVE SUBSTANTIATION. DOCUMENTS OF A TECHNICAL NATURE ARE GENERALLY AVOIDED, ALTHOUGH SECTIONS OF SOME ITEMS INCLUDE SUCH MATERIAL. INFORMATION FOR EACH ENTRY INCLUDES TITLE OF THE PUBLICATION, SOURCE, DATE, PAGES, SUPERINTENDENT OF DOCUMENTS NUMBER OR NATIONAL TECHNICAL INFORMATION SERVICE NUMBER, PRICE, AND ANNOTATION. ITEMS FOUND IN FEDERAL DEPOSITORY LIBRARIES ARE SO NOTED. ITEMS LISTED WERE ISSUED DURING THE PERIOD 1971 THROUGH THE MIDDLE OF 1973. (RM)

AVAILABILITY: ENVIRO/INFO, P. O. BOX 115, GREEN BAY, WISCONSIN 54305 ($3.00)

INSTITUTION NAME: ENVIRO/INFO, GREEN BAY, WIS.

ACCESSION NUMBER: ED089993

CLEARINGHOUSE ACCESSION NUMBER: SE017542

PUBLICATION DATE: MAR 74

TITLE: CREATE TOMORROW TODAY. AN ENERGY AWARENESS PROGRAM.

PERSONAL AUTHOR: KENNEDY, DAVE; AND OTHERS

INSTITUTION CODE: ZBQ93306

DESCRIPTOR: ACTIVITY UNITS; ANNOTATED BIBLIOGRAPHIES; *CONSERVATION EDUCATION; CURRICULUM; *ELEMENTARY SCHOOL SCIENCE; *ENERGY; *ENVIRONMENTAL EDUCATION; GUIDES; *INSTRUCTIONAL MATERIALS; RESOURCE GUIDES

EDRS PRICE: EDRS PRICE MF-$0.75 HC-$3.15 PLUS POSTAGE

DESCRIPTIVE NOTE: 73P.

ISSUE: RIEAUG74

ABSTRACT: THIS RESOURCE GUIDE IS DESIGNED FOR USE BY TEACHERS. UNITS ARE INCLUDED ON THE ENERGY CRISIS; ENVIRONMENTAL AWARENESS; AND DECISION MAKING CONCERNING SHRINKING ENERGY RESOURCES. BOTH SHORT-TERM AND LONG-TERM PROBLEMS AND ALTERNATIVES ARE DISCUSSED. GROUP AND INDIVIDUAL ACTIVITIES ARE SUGGESTED. CHARTS AND GRAPHS, SUITABLE FOR MAKING TRANSPARENCIES, ARE INCLUDED. A BIBLIOGRAPHIC SECTION DESCRIBES BOOKS, FILMS, AND GOVERNMENT PUBLICATIONS THAT ARE PERTINENT TO THE TOPICS. (LS)

INSTITUTION NAME: WASHINGTON STATE BOARD OF EDUCATION, OLYMPIA.

ACCESSION NUMBER: ED091171

CLEARINGHOUSE ACCESSION NUMBER: SE017483

PUBLICATION DATE: OCT 73

TITLE: QUESTIONS AND ANSWERS ABOUT NUCLEAR POWER PLANTS.

INSTITUTION CODE: BBB06039

DESCRIPTOR: *ENERGY; *ENVIRONMENTAL EDUCATION; RESOURCE MATERIALS; *TECHNOLOGY; *NUCLEAR POWER

EDRS PRICE: EDRS PRICE MF-$0.75 HC-$1.85 PLUS POSTAGE

DESCRIPTIVE NOTE: 28P.

ISSUE: RIESEP74

ABSTRACT: THIS PAMPHLET IS DESIGNED TO ANSWER MANY OF THE QUESTIONS THAT HAVE ARISEN ABOUT NUCLEAR POWER PLANTS AND THE ENVIRONMENT. IT IS ORGANIZED INTO A QUESTION AND ANSWER FORMAT, WITH THE QUESTIONS TAKEN FROM THOSE MOST OFTEN ASKED BY THE PUBLIC. TOPICS INCLUDE REGULATION OF NUCLEAR POWER SOURCES, POTENTIAL DANGERS TO PEOPLE'S HEALTH, WHETHER NUCLEAR POWER IS THE ANSWER TO OUR POWER NEEDS, POTENTIAL ALTERNATE POWER SOURCES AND THE LOCATIONS OF PRESENT NUCLEAR POWER PLANTS. (JP)

AVAILABILITY: SUPERINTENDENT OF DOCUMENTS, GOVERNMENT PRINTING OFFICE, WASHINGTON, D.C. 20402 (STOCK NUMBER 5500-0057, $0.50)

INSTITUTION NAME: ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, D. C.

ACCESSION NUMBER: ED091261

CLEARINGHOUSE ACCESSION NUMBER: SO007377

PUBLICATION DATE: 73

TITLE: MORAL DILEMMAS AND THE ENVIRONMENT.

PERSONAL AUTHOR: PILBURN, MICHAEL D.

DESCRIPTOR: CHILD DEVELOPMENT; CONFLICT RESOLUTION; *ENERGY CONSERVATION; *ENVIRONMENTAL EDUCATION; MODELS; MORAL DEVELOPMENT; *MORAL ISSUES; MORAL VALUES; *PROBLEM SOLVING; QUESTIONING TECHNIQUES; TEACHING TECHNIQUES; *DILEMMAS; *MORAL REASONING

EDRS PRICE: EDRS PRICE MF-$0.75 HC-$1.50 PLUS POSTAGE

DESCRIPTIVE NOTE: 8P.; PAPER PRESENTED AT THE NATIONAL COUNCIL FOR SOCIAL STUDIES (SAN FRANCISCO, NOVEMBER 19-22, 1973); CONTENT CHOSEN FROM "THE ENVIRONMENT: A HUMAN CRISIS," 1974, BY MICHAEL PILBURN

ISSUE: RIESEP74

ABSTRACT: STAGES OF MORAL REASONING THROUGH WHICH CHILDREN DEVELOP, AS RESEARCHED BY DEVELOPMENTAL PSYCHOLOGISTS JEAN PIAGET AND LAWRENCE KOHLBERG, ARE OUTLINED IN THE INTRODUCTION OF THIS PAPER. THE SIX STAGES ARE DEFINED AND EXEMPLIFIED BY THE MORAL ISSUE OF THE VALUE OF HUMAN LIFE. THE DEVELOPMENTAL MODEL, AS IT IS ARGUED, IS SUITABLE FOR INSTRUCTION IN SCHOOLS FOR DEVELOPING HIGHER LEVELS OF MORALITY IN CHILDREN BY INTERVENTION CHALLENGING THE STUDENT AT ONE LEVEL OF MORAL REASONING ABOVE THAT AT WHICH HE IS OPERATING. THE AREA OF ENVIRONMENTAL EDUCATION IN PARTICULAR APPEARS AS HAVING APPROPRIATE CONTENT AROUND WHICH TO DESIGN A SERIES OF MORAL DILEMMAS. FOUR DILEMMAS FOLLOW THE INTRODUCTORY REMARKS. EACH DILEMMA DESCRIBES A SITUATION INVOLVING ENVIRONMENTAL QUESTIONS FOR WHICH THERE IS A SERIES OF QUESTIONS LEADING TO INVESTIGATION OF THE MORAL QUESTIONS RAISED. THE DILEMMAS ARE ENTITLED, "THE ENVIRONMENTAL ACTIVIST," "THE ALASKA PIPELINE," "THE STARVING COUNTRY," AND "FAST BREEDER REACTORS." THE DILEMMAS RAISE QUESTIONS ABOUT INDIVIDUAL ACTION VS. GROUP WELFARE, ENVIRONMENTAL DESTRUCTION VS. NATIONAL CRISIS, FEEDING THE HUNGRY VS. ACTING AGAINST OVERPOPULATION, AND RADIOACTIVE DANGER VS. THE NEED FOR ENERGY. A BIBLIOGRAPHY ON MORAL DEVELOPMENT AND ENVIRONMENTAL ISSUES CONCLUDES THE PAPER. (AUTHOR/KSM)

ACCESSION NUMBER: ED091283

CLEARINGHOUSE ACCESSION NUMBER: SO007449

PUBLICATION DATE: 74

TITLE: SOLVING A COMMUNITY PROBLEM: COMPUTER CAR POOLING. PROFILES OF PROMISE 26.

PERSONAL AUTHOR: HAWKE, SHARRYL

INSTITUTION CODE: BBB03575; BBB04086

SPONSORING AGENCY CODE: BBB06621

DESCRIPTOR: COMMUNITY INVOLVEMENT; *COMMUNITY PROBLEMS; *COMPUTER PROGRAMS; *ENERGY CONSERVATION; HIGH SCHOOL STUDENTS; INTERDISCIPLINARY APPROACH; LEARNING EXPERIENCES; *PROBLEM SOLVING; PUBLIC RELATIONS; RELEVANCE (EDUCATION); SCHOOL COMMUNITY RELATIONSHIP; SELF ESTEEM; STUDENT PARTICIPATION; *STUDENT TRANSPORTATION; CAR POOLS; *PROFILES OF PROMISE

EDRS PRICE: EDRS PRICE MF-$0.75 HC-$1.50 PLUS POSTAGE

DESCRIPTIVE NOTE: 4P.

ISSUE: RIESEP74

ABSTRACT: THE IDEA OF COMPUTERIZED CAR POOLING ORIGINATED IN AN AMERICAN CONTEMPORARY ISSUES CLASS AT GEORGE WASHINGTON HIGH SCHOOL IN DENVER, COLORADO, IN THE FALL OF 1973 WHEN A FUEL SHORTAGE WAS IMMINENT. THE STUDENTS SAW CAR POOLING AS A WAY TO TAKE EFFECTIVE ACTION AND, WITH THE EXPERTISE OF A COMPUTER MATH CLASS, DEVISED A PROGRAM CAPABLE OF DELIVERING INFORMATION THAT MATCHED STUDENTS LIVING NEAR EACH OTHER AND ATTENDING SCHOOL AT THE SAME HOUR. ALTHOUGH THE STUDENT POPULATION DID NOT RESPOND AS EAGERLY AS HOPED, THE WORKING COMMUNITY OF DENVER DID. WHEN NEWSPAPER, RADIO, AND TV EXPOSED THEM TO THE PROGRAM'S POTIENTIAL, RESPONSE WAS GREAT ENOUGH TO REQUIRE AN ACTION OFFICE AND BRIEFING TEAMS OF STUDENTS TO DESCRIBE THE PROGRAM TO THE INTERESTED FIRMS. CITY, STATE, AND FEDERAL GOVERNMENTS ALSO SAW THE POTENTIAL OF THE PROGRAM. AT GEORGE WASHINGTON THE EXPERIENCE BROUGHT SELF-CONFIDENCE TO THOSE STUDENTS INVOLVED, AN INTERDISCIPLINARY TOGETHERNESS TO THE TEACHERS, AND A NEW REPUTATION TO THE SCHOOL AS A VIABLE INSTITUTION FOR EDUCATION. (JH)

INSTITUTION NAME: ERIC CLEARINGHOUSE FOR SOCIAL STUDIES/SOCIAL SCIENCE EDUCATION, BOULDER, COLO.; SOCIAL SCIENCE EDUCATION CONSORTIUM, INC., BOULDER, COLO.

SPONSORING AGENCY NAME: NATIONAL INST. OF EDUCATION (DHEW), WASHINGTON, D.C.

ACCESSION NUMBER: ED092376

CLEARINGHOUSE ACCESSION NUMBER: SE017914

PUBLICATION DATE: FEB 74

TITLE: ENVIRONMENTAL EDUCATION: STRATEGIES FOR WISE USE OF ENERGY.

INSTITUTION CODE: BBB06588

DESCRIPTOR: *ENERGY; *ENVIRONMENTAL EDUCATION; *INTERDISCIPLINARY APPROACH; *LEARNING ACTIVITIES; NATURAL RESOURCES; *RESOURCE MATERIALS; RESOURCE UNITS; TEACHING GUIDES

EDRS PRICE: EDRS PRICE MF-$0.75 HC-$4.20 PLUS POSTAGE

DESCRIPTIVE NOTE: 75P.

ISSUE: RIEOCT74

ABSTRACT: THIS PUBLICATION WAS DESIGNED FOR TEACHERS TO USE AT ALL LEVELS IN THE ELEMENTARY AND SECONDARY SCHOOLS. IN ADDITION, CERTAIN PORTIONS OF IT COULD BE USED WITH ADULT GROUPS. IT IS COMPOSED OF NUMEROUS INTERDISCIPLINARY

INSTRUCTIONAL ACTIVITIES RELATED TO ENERGY USE AND CONSERVATION. FOR CONVENIENCE, THE ACTIVITIES ARE GROUPED FOR GRADES K-3, GRADES 4-6, AND GRADES 7-12. THE APPENDIX CONTAINS VARIOUS ITEMS SUCH AS CHECKLISTS, CHARTS, GLOSSARY, AND SELECTED READINGS AND FILMS FOR EDUCATORS. (JP)

INSTITUTION NAME: NORTH CAROLINA STATE DEPT. OF PUBLIC INSTRUCTION, RALEIGH. DIV. OF SCIENCE EDUCATION.

ACCESSION NUMBER: ED092395

CLEARINGHOUSE ACCESSION NUMBER: SE017968

PUBLICATION DATE: FEB 74

TITLE: ENERGY, KEY TO THE FUTURE. TEACHING TECHNIQUES FOR THE UNDERSTANDING AND CONSERVATION OF ENERGY, K-12.

PERSONAL AUTHOR: MENGEL, WAYNE

INSTITUTION CODE: BBB10430

DESCRIPTOR: CURRICULUM; *ENERGY; *ENVIRONMENTAL EDUCATION; *INSTRUCTION; *LEARNING ACTIVITIES; RESOURCE MATERIALS; *TEACHING GUIDES

EDRS PRICE: EDRS PRICE MF-$0.75 HC-$1.85 PLUS POSTAGE

DESCRIPTIVE NOTE: 36P.

ISSUE: RIEOCT74

ABSTRACT: THE TEACHING TECHNIQUES PRESENTED IN THIS BOOKLET ARE DESIGNED TO PROVIDE STUDENTS WITH CONCEPTS WHICH RELATE TO THE ENERGY CRISIS AND ENERGY CONSERVATION. THE TECHNIQUES ARE NOT PRESENTED IN THE FORM OF COMPLETED LESSON PLANS, BUT RATHER ARE INTENDED TO ACT AS STARTING POINTS FOR FURTHER DEVELOPMENT BY THE TEACHER. GENERAL ACTIVITIES FOR STUDENTS ARE SUGGESTED FOR THE TOPICS OF CONSERVATION OF ENERGY; PRODUCTION OF ELECTRICITY AND HEAT; SOCIAL IMPACT, POLITICAL IMPLICATIONS, ECONOMICS, AND GEOGRAPHY OF THE ENERGY CRISIS; AND ENERGY IN TRANSPORTATION, IN THE HOME, IN THE SCHOOL, AND IN THE COMMUNITY. TWENTY-TWO PROJECTS RELATED TO THE ENERGY CRISIS AND ENERGY CONSERVATION ALSO ARE SUGGESTED. TIPS ON HOW TO CONSERVE ENERGY AND SEVERAL DIAGRAMS CONCERNING ENERGY TOPICS ARE PROVIDED. (DT)

INSTITUTION NAME: DUTCHESS COUNTY BOARD OF COOPERATIVE EDUCATIONAL SERVICES, POUGHKEEPSIE, N.Y.

ACCESSION NUMBER: ED092418

CLEARINGHOUSE ACCESSION NUMBER: SO007494

PUBLICATION DATE: NOV 73

TITLE: THE LEARNING TREE: THE ENERGY CRISIS, ENVIRONMENT & CAREERS.

PERSONAL AUTHOR: MINTENER, BRADSHAW, ED.

INSTITUTION CODE: BB810362

DESCRIPTOR: *CAREER EDUCATION; COMMUNITY STUDY; *ENERGY CONSERVATION; *ENVIRONMENTAL EDUCATION; INFORMATION SYSTEMS; *NEWSLETTERS; PARENT SCHOOL RELATIONSHIP; PUBLIC SCHOOLS; SCHOOL COMMUNITY RELATIONSHIP; *SIMULATION; STUDENT PARTICIPATION

EDRS PRICE: EDRS PRICE MF-$0.75 HC-$1.50 PLUS POSTAGE

DESCRIPTIVE NOTE: 16P.

ISSUE: RIEOCT74

ABSTRACT: LEARNING AND TEACHING IN THE MADISON, WISCONSIN PUBLIC SCHOOLS IS THE FOCUS OF THIS NEWSLETTER ANNOUNCED HERE IN A ONE TIME BASIS. THE NEWSLETTER IS ISSUED MONTHLY DURING THE SCHOOL YEAR. THE THEME OF THIS ISSUE IS THE ENERGY CRISIS, THE ENVIRONMENT, AND CAREERS. A MONTHLY MEMO, A REGULAR FEATURE, INTRODUCES THE THEME, FOLLOWED BY IDEAS FOR THE CLASSROOM. THE MAJOR PORTION OF THE NEWSLETTER IS DEVOTED TO THE PRESENTATION OF A SIMULATION GAME, CALLED CARENTON CONNECTOR OR BYPASS GAME. A NEWSPAPER, MAP, CITIZEN QUESTIONNAIRE, AND INFORMATION CARDS CONSTITUTE A SIMULATION WHICH ENCOURAGES HIGH STUDENT INVOLVEMENT IN SOLVING REAL COMMUNITY PROBLEMS IN PLANNING AND IN ENVIRONMENT. CAREER CLUSTERS RELATED TO THE SIMULATION ARE DISCUSSED. AN EDUCATION INFORMATION SYSTEM PROPOSES A TOTAL SCHOOL-COMMUNITY APPROACH IN GATHERING AND CATALOGING USEFUL, POTENTIAL PROBLEM-SOLVING INFORMATION FOR COMMUNITY GOALS AND PROBLEMS. AN ARTICLE ON A REMEDIAL PHYSICAL EDUCATION PROGRAM IS FOLLOWED BY A COLUMN VOICING PARENT OPINIONS AND ACTIVITIES. TOPICS OF PAST ISSUES INCLUDE HUMAN RELATIONS, MATH, FOREIGN LANGUAGES, INSERVICE TEACHER TRAINING, AND TESTING AND EVALUATION. ISSUES ARE FREE FROM THE MADISON PUBLIC SCHOOLS, PUBLIC INFORMATION OFFICE. (KSM)

AVAILABILITY: MADISON PUBLIC SCHOOLS, PUBLIC INFORMATION OFFICE, 545 WEST DAYTON, MADISON, WISCONSIN 53703 (FREE)

INSTITUTION NAME: MADISON PUBLIC SCHOOLS, WIS. PUBLIC INFORMATION OFFICE.

ACCESSION NUMBER: ED093590

CLEARINGHOUSE ACCESSION NUMBER: SE016891

PUBLICATION DATE: 73

TITLE: TEACHING IDEAS ABOUT MAN AND THE ENVIRONMENT.

INSTITUTION CODE: BE172714

SPONSORING AGENCY CODE: BBB00677

DESCRIPTOR: *CONFERENCE REPORTS; ECOLOGY; ENERGY; ENVIRONMENT; *ENVIRONMENTAL EDUCATION; ENVIRONMENTAL INFLUENCES; *INTERDISCIPLINARY APPROACH; SCIENCE EDUCATION; SECONDARY SCHOOL SCIENCE; SOCIAL PLANNING; ELEMENTARY SECONDARY EDUCATION ACT TITLE III; ESEA TITLE III

EDRS PRICE: EDRS PRICE MF-$0.75 HC-$11.40 PLUS POSTAGE

DESCRIPTIVE NOTE: 241P.; MARGINAL LEGIBILITY ON CERTAIN CHARTS WHICH DO NOT CONTAIN PERTINENT INFORMATION

ISSUE: RIENOV74

ABSTRACT: THIS IS A COLLECTION OF PAPERS WHICH RESULTED FROM AN ASSIGNMENT GIVEN IN A SEMINAR DEALING WITH THE TOPIC MAN AND HIS ENVIRONMENT AT PHOENIX UNION HIGH SCHOOL, ARIZONA. THE INTERDISCIPLINARY SEMINAR FOCUSED ON THE RELATIONSHIPS BETWEEN MAN AND HIS PHYSICAL ENVIRONMENT. ITS PURPOSE WAS TO INTRODUCE THE PARTICIPANTS TO THE SPECTRUM OF ENVIRONMENTAL PROBLEMS CONFRONTING PEOPLE TODAY, TO FOCUS ON THE BASIC PRINCIPLES AND AREAS OF KNOWLEDGE WHICH APPLY TO EACH, TO EXPLORE THE RESOURCES WHICH ARE AVAILABLE TO SOLVE THE PROBLEMS, AND TO MAKE A FIRST STEP TOWARD INTEGRATING THIS MATERIAL INTO COURSES AT THE HIGH SCHOOL LEVEL. THE COURSE DEALT SUCCESSIVELY WITH ECOLOGY, CITIES, AND PEOPLE; AND COVERED SUCH AREAS AS NATURAL SYSTEMS, ENERGY SOURCES, POLLUTION, LAND USE, SOCIAL GOALS, URBAN RENEWAL, HOUSING, TRANSPORTATION, NEW TOWNS, ENVIRONMENTAL HEALTH, AND PERSONAL SPACE NEEDS. THE COURSE WAS AIMED AT INCREASING THE PARTICIPANTS' KNOWLEDGE BASE AS A PRECEDENT TO IMPLEMENTATION OF THIS SUBJECT AREA IN THE HIGH SCHOOL CLASSROOM. (AUTHOR/PEB)

INSTITUTION NAME: PHOENIX UNION HIGH SCHOOL DISTRICT, ARIZ.

SPONSORING AGENCY NAME: BUREAU OF ELEMENTARY AND SECONDARY EDUCATION (DHEW/OE), WASHINGTON, D.C.

ACCESSION NUMBER: ED093649

CLEARINGHOUSE ACCESSION NUMBER: SE017398

PUBLICATION DATE: JAN 74

TITLE: ENERGY, ENVIRONMENTAL EDUCATION CURRICULUM.

INSTITUTION CODE: KUJ24608

SPONSORING AGENCY CODE: BBB00677

DESCRIPTOR: ACTIVITY LEARNING; *CONSERVATION EDUCATION; CURRICULUM; *ELEMENTARY GRADES; *ENERGY; *ENVIRONMENTAL EDUCATION; INSTRUCTION; INSTRUCTIONAL MATERIALS; *UNIT PLAN; ELEMENTARY SECONDARY EDUCATION ACT TITLE III; ESEA TITLE III

EDRS PRICE: EDRS PRICE MF-$0.75 HC-$7.80 PLUS POSTAGE

DESCRIPTIVE NOTE: 158P.

ISSUE: RIENOV74

ABSTRACT: THE MATERIAL IN THIS UNIT IS INTENDED TO PROVIDE UPPER ELEMENTARY STUDENTS WITH BASIC INFORMATION ABOUT: (1) WHAT ENERGY IS; (2) WHERE IT COMES FROM, (3) HOW WE USE IT, AND (4) WAYS WE CAN MORE WISELY USE THE ENERGY AVAILABLE TO US. BY THE COMPLETION OF THE STUDY OF THIS UNIT, A STUDENT SHOULD BE WELL AWARE THAT ANY LIFE STYLE IS CLOSELY RELATED TO THE AMOUNT OF ENERGY AVAILABLE AND BEING CONSUMED. OBJECTIVES ARE LISTED IN FRONT OF THE UNIT FOLLOWED BY A CROSS-REFERENCE RELATING THE OBJECTIVES TO THE APPROPRIATE ACTIVITIES. MAPS, CHARTS, GRAPHS, SHORT ARTICLES, SPECIAL ACTIVITIES, AND OTHER MATERIALS REFERRED TO IN THE VARIOUS ACTIVITIES ARE INCLUDED IN THE APPENDIX. (JP)

INSTITUTION NAME: TOPEKA PUBLIC SCHOOLS, KANS.

SPONSORING AGENCY NAME: BUREAU OF ELEMENTARY AND SECONDARY EDUCATION (DHEW/OE), WASHINGTON, D.C.

ACCESSION NUMBER: ED093656

CLEARINGHOUSE ACCESSION NUMBER: SE017614

PUBLICATION DATE: 72

TITLE: ENERGY AND WORK, SCIENCE (EXPERIMENTAL): 5348.05.

PERSONAL AUTHOR: PLOTTS, PAUL L.

INSTITUTION CODE: HWP20100

DESCRIPTOR: *ENERGY; INSTRUCTION; *INSTRUCTIONAL MATERIALS; PHYSICAL SCIENCES; SCIENCE EDUCATION; *SECONDARY SCHOOL SCIENCE; *TEACHING GUIDES; UNITS OF STUDY (SUBJECT FIELDS); *QUINMESTER PROGRAM

EDRS PRICE: EDRS PRICE MF-$0.75 HC-$1.50 PLUS POSTAGE

DESCRIPTIVE NOTE: 16P.; AN AUTHORIZED COURSE OF INSTRUCTION FOR THE QUINMESTER PROGRAM

ISSUE: RIENOV74

ABSTRACT: THIS UNIT OF INSTRUCTION INTRODUCES THE MEASURING OF WORK, POWER, AND ENERGY; FORMS OF ENERGY; CONVERSION AND CONSERVATION OF ENERGY; AND TYPES OF MACHINES. IT IS A COURSE SUGGESTED FOR THE TERMINAL SCIENCE STUDENT. NO REQUISITES FOR PRIOR COURSE WORK ARE SUGGESTED. THE BOOKLET LISTS THE STATE-ADOPTED TEXTS IN THE LIST OF REFERENCES. IT STATES THE PERFORMANCE OBJECTIVES AND THE COURSE OUTLINE. EXPERIMENTS, DEMONSTRATIONS, PROJECTS, AND PROBLEMS ARE FOUND IN THE BOOKLET. RELEVANT FILMS AVAILABLE FROM THE DADE COUNTY AUDIOVISUAL CENTER ARE LISTED, AND A MASTER SHEET IS PROVIDED RELATING EACH SUGGESTED ACTIVITY TO THE SPECIFIC PERFORMANCE OBJECTIVES. (EB)

INSTITUTION NAME: DADE COUNTY PUBLIC SCHOOLS, MIAMI, FLA.

ACCESSION NUMBER: ED093695

CLEARINGHOUSE ACCESSION NUMBER: SE018059

PUBLICATION DATE: 74

TITLE: EARTHWATCHING, A COLLECTION OF SCRIPTS FROM THE FIRST YEAR OF EARTHWATCH/RADIO.

PERSONAL AUTHOR: WEIMER, LINDA, ED.; ABBOTT, BARBARA, ED.

INSTITUTION CODE: BBB04846; BBB07176

SPONSORING AGENCY CODE: BBB08824; BBB10356

DESCRIPTOR: AIR POLLUTION CONTROL; ECOLOGY; *EDUCATIONAL RADIO; ENERGY; ENVIRONMENT; *ENVIRONMENTAL EDUCATION; LAND USE; *PROGRAMING (BROADCAST); RADIO; WATER POLLUTION CONTROL; WATER RESOURCES; WILDLIFE MANAGEMENT

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 218P.

ISSUE: RIENOV74

ABSTRACT: ONE-PAGE SCRIPTS SELECTED FROM A COLLECTION OF 300 RADIO PROGRAMS, PRESENTED SEPTEMBER 1972-DECEMBER 1973, COMPRISE THIS PUBLICATION. TAKEN TOGETHER THEY FORM A 15-MONTH ENVIRONMENTAL CHRONICLE. SUBJECT CATEGORIES INCLUDE WATER QUALITY; THE OCEANS; THE GREAT LAKES; AIR; LAND; LIFE: PLANTS/ANIMALS/MAN; AND ENERGY. EARTHWATCH RADIO STATIONS ARE LISTED. (DT)

AVAILABILITY: SEA GRANT COMMUNICATIONS OFFICE, 1225 WEST DAYTON STREET, MADISON, WISCONSIN 53706 ($1.00)

INSTITUTION NAME: WISCONSIN UNIV., MADISON. INST. FOR ENVIRONMENTAL STUDIES.; WISCONSIN UNIV., MADISON. SEA GRANT PROGRAM.

SPONSORING AGENCY NAME: NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (DOC), ROCKVILLE, MD. NATIONAL SEA GRANT PROGRAM.; NATIONAL SCIENCE FOUNDATION, WASHINGTON, D.C. RANN PROGRAM.

ACCESSION NUMBER: ED093697

CLEARINGHOUSE ACCESSION NUMBER: SE018064

PUBLICATION DATE: MAY 74

TITLE: ENERGY EDUCATION.

INSTITUTION CODE: FGK01540

DESCRIPTOR: *CURRICULUM; *ENERGY; *ENVIRONMENTAL EDUCATION; *INSTRUCTION; INSTRUCTIONAL MATERIALS; NEWSLETTERS; *SCIENCE EDUCATION

EDRS PRICE: EDRS PRICE MF-$0.75 HC-$1.50 PLUS POSTAGE

DESCRIPTIVE NOTE: 8P.

ISSUE: RIENOV74

ABSTRACT: THIS NEWSLETTER IS CONCERNED WITH ENERGY EDUCATION PROGRAMS FOR THE GENERAL PUBLIC. THE NATURE OF THE TARGET AUDIENCE IS ANALYZED FIRST, THEN THE DISCUSSION TURNS TO THE QUESTIONS OF WHAT GOALS MAY BE SET FOR SUCH PROGRAMS AND WHAT VEHICLES OR AGENCIES MAY BE USED. FOUR NEW CURRICULUM PROJECT MATERIALS ARE REVIEWED AND DESCRIPTIONS OF NINE PUBLICATIONS APPROPRIATE FOR COURSES ON ENERGY ARE CITED. ANNOUNCEMENTS OF PUBLICATIONS ON ENERGY AND ENERGY SOURCES, OF WORKSHOPS AND CONFERENCES, OF A RADIO PROGRAM CONCERNED WITH THE ENERGY CRISIS, AND OF FILMS ON ENERGY COMPLETE THE NEWSLETTER. (DT)

AVAILABILITY: AAAS, 1515 MASSACHUSETTS AVENUE, N.W., WASHINGTON, D.C. 20005 (MISC. PUB. NO. 74-7)

JOURNAL CITATION: SCIENCE EDUCATION NEWS; MAY74

INSTITUTION NAME: AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE, WASHINGTON, D.C.

ACCESSION NUMBER: ED093765

CLEARINGHOUSE ACCESSION NUMBER: SO007619

PUBLICATION DATE: JAN 74

TITLE: THE ENERGY CRISIS -- AIDS TO STUDY.

PERSONAL AUTHOR: MCDANIEL, MARGARET, COMP.

INSTITUTION CODE: BBB10524

SPONSORING AGENCY CODE: HRG66000

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; DEPLETED RESOURCES; ELECTRICITY; ELEMENTARY GRADES; ENERGY; *ENERGY CONSERVATION; *ENVIRONMENTAL EDUCATION; *FUELS; *FUTURES (OF SOCIETY); HEAT; INSTRUCTIONAL MATERIALS; LIFE STYLE; PETROLEUM INDUSTRY; POPULATION TRENDS; RESOURCE ALLOCATIONS; SECONDARY GRADES; SOLAR RADIATION; ENERGY CRISIS

EDRS PRICE: EDRS PRICE MF-$0.75 HC-$1.85 PLUS POSTAGE

DESCRIPTIVE NOTE: 25P.; FOR RELATED DOCUMENTS, SEE SO007618 AND SO007617

ISSUE: RIENOV74

ABSTRACT: OVER ONE-HUNDRED CITATIONS, THE MAJORITY OF WHICH ARE CURRENT WORKS DATING FROM THE SEVENTIES, ARE PROVIDED IN THIS ANNOTATED BIBLIOGRAPHY FOCUSING ON ENERGY. ENTRIES INCLUDE BOOKS, PAMPHLETS, REPORTS, MAGAZINE ARTICLES, BIBLIOGRAPHIES, NEWSLETTERS, AND CURRICULUM MATERIALS, SUCH AS AUDIOVISUAL AIDS, GUIDES AND UNITS, AND SIMULATIONS WHICH WILL BE USEFUL IN BEGINNING A STUDY OF THE ENERGY CRISIS. MULTI-DISCIPLINARY MATERIALS ARE INCLUDED. MATERIALS PARTICULARLY SUITABLE FOR USE AT THE ELEMENTARY LEVEL ARE MARKED WITH AN ASTERISK, ALTHOUGH ELEMENTARY TEACHERS CAN FIND MUCH INTERESTING INFORMATION IN THE OTHER CITATIONS. THE CONCLUDING SECTION CONTAINS ADDRESSES FOR OBTAINING THE MATERIALS CITED. (AUTHOR/JH)

AVAILABILITY: MATHEWAY ENVIRONMENTAL EDUCATION INSTITUTE, MASSACHUSETTS AUDUBON SOCIETY, LINCOLN MASS. 01773 ($0.60 EACH)

INSTITUTION NAME: MASSACHUSETTS AUDUBON SOCIETY, LINCOLN. MATHEWAY ENVIRONMENTAL EDUCATION INST.

SPONSORING AGENCY NAME: OFFICE OF EDUCATION (DHEW), WASHINGTON, D.C.

ACCESSION NUMBER: ED094474

CLEARINGHOUSE ACCESSION NUMBER: EA006320

PUBLICATION DATE: 7 JAN 74

TITLE: EFFECTS OF ENERGY CRISIS ON EDUCATION, 1974. HEARING BEFORE THE SUBCOMMITTEE ON EDUCATION OF THE COMMITTEE ON LABOR AND PUBLIC WELFARE, UNITED STATES SENATE, NINETY-THIRD CONGRESS, SECOND SESSION ON EXAMINATION OF CURRENT ENERGY CRISIS AND THE EFFECT IT WILL HAVE ON THE EDUCATION OFFERING OF THE NATION'S SCHOOLS AND COLLEGES.

INSTITUTION CODE: FGK18410

DESCRIPTOR: CURRICULUM DEVELOPMENT; EDUCATIONAL NEEDS; ELEMENTARY SCHOOLS; *ENERGY; *ENERGY CONSERVATION; FEDERAL GOVERNMENT; *FINANCIAL PROBLEMS; *FUEL CONSUMPTION; HIGHER EDUCATION; SCHOOL CONDITIONS; SCHOOLS; SECONDARY SCHOOLS

EDRS PRICE: EDRS PRICE MF-$0.75 HC-$13.80 PLUS POSTAGE

DESCRIPTIVE NOTE: 296P.

ISSUE: RIEDEC74

ABSTRACT: CONGRESSMEN, FEDERAL ADMINISTRATION SPOKESMEN, EDUCATION ASSOCIATION REPRESENTATIVES, AND STATE AND LOCAL OFFICIALS OFFER THEIR COMMENTS IN THESE HEARINGS ON THE EFFECTS OF THE ENERGY CRISIS ON THE NATION'S EDUCATION PROGRAMS. (JF)

INSTITUTION NAME: CONGRESS OF THE U.S., WASHINGTON, D.C. SENATE COMMITTEE ON LABOR AND PUBLIC WELFARE.

ACCESSION NUMBER: ED094477

CLEARINGHOUSE ACCESSION NUMBER: EA006323

PUBLICATION DATE: JUL 74

TITLE: ENERGY CONSERVATION AND THE BUILDING SHELL. BSIC/EFL ENERGY WORKBOOK: SECTION 1.

INSTITUTION CODE: BBB02923

DESCRIPTOR: BUILDING CONVERSION; *BUILDING DESIGN; *BUILDING IMPROVEMENT; *BUILDING MATERIALS; CLIMATE CONTROL; *COST EFFECTIVENESS; *ENERGY CONSERVATION; FUEL CONSUMPTION; HEATING; LIGHTING; VENTILATION; WINDOWS; WORKBOOKS; *LIFE CYCLE COST ANALYSIS

EDRS PRICE: EDRS PRICE MF-$0.75 HC-$1.85 PLUS POSTAGE

DESCRIPTIVE NOTE: 34P.

ISSUE: RIEDEC74

ABSTRACT: THIS ENERGY CONSERVATION WORKBOOK SERIES WAS DEVELOPED TO PROVIDE SPECIFIC DATA ON THE EFFECT OF VARIOUS DESIGN AND OPERATING DECISIONS ON BOTH COST AND ENERGY CONSUMPTION. IT IS DESIGNED TO MAKE CLEAR THE ENERGY CONSUMPTION AND COST IMPLICATIONS OF VARIOUS BUILDING DESIGN AND OPERATING DECISIONS IN TERMS THAT BOTH THE LAYMAN AND DESIGN PROFESSIONAL CAN UNDERSTAND. THE WORKBOOK WILL BE RELEASED IN THREE SECTIONS -- ENERGY CONSERVATION AND THE BUILDING SHELL, MECHANICAL SYSTEMS, AND PROBLEMS OF SCHOOL LIGHTING AND ENERGY CONSERVATION. THE INTENT OF THE SERIES IS TO PROVIDE A SIMPLE MEANS FOR DETERMINING THE CONSEQUENCES OF THE VARIOUS POSSIBLE DECISION OPTIONS OPEN TO DESIGNERS AND SCHOOL OFFICIALS. THIS SECTION, THE FIRST OF THE SERIES, EXAMINES WHAT CAN BE DONE IN DESIGNING OR REDESIGNING THE BUILDING'S SHELL TO MAKE THE WISEST LONG-RUN USE OF RESOURCES. THE TEXT EXPLAINS HOW THE BUILDING SHELL AFFECTS THE BUILDING'S ENERGY CONSUMPTION, IDENTIFIES ENERGY CONSERVING IDEAS FOR USE IN THE DESIGN (OR REDESIGN) OF THE SHELL, GIVES EXAMPLES SHOWING HOW THESE IDEAS COULD BE APPLIED TO NEW CONSTRUCTION AND MODERNIZATION PROJECTS, PROVIDES A SIMPLE METHOD FOR DETERMINING THE EFFECTS OF EACH OF THESE IDEAS, AND IDENTIFIES SOURCES OF FURTHER INFORMATION TO ASSIST DESIGN PROFESSIONALS IN COMPLETE ANALYSIS OF THE EFFECT OF THE BUILDING SHELL ON ENERGY CONSUMPTION. (PHOTOGRAPHS MAY REPRODUCE POORLY.) (AUTHOR)

AVAILABILITY: BSIC/EFL, 3000 SAND HILL ROAD, MENLO PARK, CALIFORNIA 94025 ($3.00)

INSTITUTION NAME: BUILDING SYSTEMS INFORMATION CLEARINGHOUSE, MENLO PARK, CALIF.

ACCESSION NUMBER: ED094977

CLEARINGHOUSE ACCESSION NUMBER: SE017320

PUBLICATION DATE: 73

TITLE: QUALITY OF LIVING: ENVIRONMENTAL VIEWPOINTS. MAKE UP YOUR OWN MIND, BOOK 3.

PERSONAL AUTHOR: POLLIS, ADAMANTIA, ED.

INSTITUTION CODE: BBB10714

DESCRIPTOR: *DISCUSSION PROGRAMS; ENERGY; *ENVIRONMENTAL EDUCATION; LAND USE; OPINIONS; *POLLUTION; POPULATION GROWTH; SOCIAL WELFARE; *TECHNOLOGY; URBAN ENVIRONMENT

EDRS PRICE: EDRS PRICE MF-$0.75 HC-$6.60 PLUS POSTAGE

DESCRIPTIVE NOTE: 146P.

ISSUE: RIEDEC74

ABSTRACT: THIS BOOK IS THE THIRD IN A SERIES OF DISCUSSION MATERIALS. THIS ISSUE BEING PART OF AN ACTION PROJECT TO INCREASE ENVIRONMENTAL AWARENESS. OVER 60 READINGS ARE INCLUDED THAT COVER A WIDE VARIETY OF OPINIONS AND INTERPRETATIONS OF SPECIFIC ENVIRONMENTAL PROBLEMS AND RELATED PHILOSOPHIC ISSUES. EXAMPLES OF TOPICS DISCUSSED

INCLUDE POPULATION, LAND USE, URBANIZATION, CONSUMER NEEDS AND WELFARE, POLLUTION, TECHNOLOGY, AND ENERGY CRISIS. AUTHORS SUCH AS JOHN QUINCY ADAMS, ARNOLD TOYNBEE, HENRY DAVID THOREAU, AND OTHERS ADD HISTORICAL BACKGROUND TO CURRENT PROBLEMS. (LS)

INSTITUTION NAME: AMERICAN INST. OF DISCUSSION, OKLAHOMA CITY, OKLA.

ACCESSION NUMBER: ED095020

CLEARINGHOUSE ACCESSION NUMBER: SE018105

PUBLICATION DATE: 74

TITLE: ENERGY INFORMATION NEEDS--STUDY BY THE GENERAL ACCOUNTING OFFICE; COMMITTEE ON INTERIOR AND INSULAR AFFAIRS, UNITED STATES SENATE, NINETY-THIRD CONGRESS, SECOND SESSION.

INSTITUTION CODE: 88806153

DESCRIPTOR: *ENERGY; *ENVIRONMENT; *FEDERAL GOVERNMENT; FUELS; *INFORMATION NEEDS; PUBLIC POLICY; STATE OF THE ART REVIEWS

EDRS PRICE: EDRS PRICE MF-$0.75 HC-$4.20 PLUS POSTAGE

DESCRIPTIVE NOTE: 82P.

ISSUE: RIEDEC74

ABSTRACT: THIS PUBLICATION CONTAINS A STUDY BY THE GENERAL ACCOUNTING OFFICE WHICH SURVEYS THE PRESENT INADEQUATE FEDERAL SYSTEM FOR GATHERING AND ANALYZING STATISTICS ABOUT ENERGY PRODUCTION AND USE. THE MAGNITUDE OF THE FEDERAL ENERGY DATA EFFORT IS DISCUSSED, PROBLEM AREAS ARE SPECIFIED, DETAILS OF RECENT EXECUTIVE AND LEGISLATIVE ACTIVITIES ARE PROVIDED, AND STEPS TO IMPROVE THE SYSTEM ARE RECOMMENDED. AN APPENDIX INCLUDES ENERGY DATA PROFILES OF 10 FEDERAL COMMISSIONS, COUNCILS, AND BUREAUS WHICH COLLECT, USE, AND REPORT DATA ON ENERGY. (DT)

AVAILABILITY: SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON, D.C. 20402 ($1.10)

INSTITUTION NAME: CONGRESS OF THE U.S., WASHINGTON, D.C. SENATE COMMITTEE ON INTERIOR AND INSULAR AFFAIRS.

ACCESSION NUMBER: ED095024

CLEARINGHOUSE ACCESSION NUMBER: SE018182

PUBLICATION DATE: 74

TITLE: LEARNING ACTIVITY PACKAGE, BIOLOGY 102, (LAP) STUDIES 1, 3, AND 4.

PERSONAL AUTHOR: RHODEN, BRUCE

INSTITUTION CODE: 88806959

DESCRIPTOR: AUTOINSTRUCTIONAL PROGRAMS; BIOLOGY; *CLASSIFICATION; *ENERGY; *INDIVIDUALIZED INSTRUCTION; INSTRUCTIONAL MATERIALS; *REPRODUCTION (BIOLOGY); SCIENCE EDUCATION; *SECONDARY SCHOOL SCIENCE; SELF HELP PROGRAMS; UNITS OF STUDY (SUBJECT FIELDS); LAP; LEARNING ACTIVITY PACKAGE

EDRS PRICE: EDRS PRICE MF-$0.75 HC-$1.50 PLUS POSTAGE

DESCRIPTIVE NOTE: 24P.; SEE ED 090 332 - 333 AND SE 018 183 - 185 FOR RELATED BIOLOGY LAP MATERIALS

ISSUE: RIEDEC74

ABSTRACT: INCLUDED ARE THREE LEARNING ACTIVITY PACKAGE (LAP) STUDIES FOR USE IN HIGH SCHOOL BIOLOGY: EVERYTHING HAS A PLACE (GROUPING AND THE DIVERSITY OF LIFE), ENERGY RELATIONS, AND REPRODUCTION. EACH LAP CONTAINS A RATIONALE FOR TEACHING THE MATERIAL INCLUDED, STUDENT OBJECTIVES (STATED IN BEHAVIORAL TERMS), A LIST OF RELATED RESOURCES (BOOKS, AUDIOVISUAL AIDS), LABORATORY ACTIVITIES, AND A STUDENT SELF-EVALUATION. (PEB)

INSTITUTION NAME: NINETY SIX HIGH SCHOOL, S. C.

ACCESSION NUMBER: ED095312

CLEARINGHOUSE ACCESSION NUMBER: CE001804

PUBLICATION DATE: 74

TITLE: EMPLOYMENT AND UNEMPLOYMENT IN 1973. SPECIAL LABOR FORCE REPORT 163.

PERSONAL AUTHOR: GILROY, CURTIS L.; BRADSHAW, THOMAS F.

INSTITUTION CODE: FGK08392

DESCRIPTOR: *CENSUS FIGURES; ECONOMIC RESEARCH; *EMPLOYMENT; *EMPLOYMENT PATTERNS; *EMPLOYMENT STATISTICS; ENERGY CONSERVATION; FUEL CONSUMPTION; LABOR ECONOMICS; LABOR MARKET; LABOR TURNOVER; STATISTICAL DATA; STATISTICAL SURVEYS; *UNEMPLOYMENT; ENERGY CRISIS

EDRS PRICE: EDRS PRICE MF-$0.75 HC-$3.15 PLUS POSTAGE

DESCRIPTIVE NOTE: 51P.; THIRTY-THREE PAGES OF SUPPLEMENTARY TABLES OF STATISTICAL DATA MAY BE MARGINALLY LEGIBLE DUE TO SMALL PRINT

ISSUE: RIEJAN75

ABSTRACT: THE DOCUMENT DESCRIBES THE NATIONAL EMPLOYMENT PERFORMANCE FOR 1973, REVEALING IT TO HAVE BEEN GENERALLY QUITE IMPRESSIVE, AS NEARLY ALL SIGNIFICANT LABOR FORCE INDICATORS POINTED TO A STRONG YEAR. TOTAL EMPLOYMENT POSTED THE GREATEST PERCENTAGE INCREASE SINCE 1955, WITH ADULT MEN AND WOMEN EACH GAINING ABOUT 1.1 MILLION JOBS; THE NUMBER OF JOBLESS DROPPED TO 4.3 MILLION, AS THE UNEMPLOYMENT RATE DECLINED. AS THE YEAR CAME TO A CLOSE, HOWEVER, THE EMERGING ENERGY SHORTAGE BEGAN TO AFFECT EMPLOYMENT POLICIES OF FIRMS. THE EXTENT TO WHICH JOBLESSNESS MIGHT RISE AND EMPLOYMENT AND HOURS MIGHT FALL IN THE MONTHS AHEAD COULD NOT BE DETERMINED, BUT CONSUMPTION PATTERNS OF HOUSEHOLDS, BUSINESS, AND GOVERNMENT WERE BEING ALTERED AND IT WAS OBVIOUS THAT SOME ECONOMIC DISORDER WOULD OCCUR. THIRTY-THREE PAGES OF TABLES OF STATISTICAL DATA SUPPLEMENT THE TEXT. (AUTHOR/AJ)

REPORT NUMBER: SLFR-163

AVAILABILITY: BUREAU OF LABOR STATISTICS, WASHINGTON, D.C.

INSTITUTION NAME: BUREAU OF LABOR STATISTICS (DOL), WASHINGTON, D.C.

ACCESSION NUMBER: ED095965

CLEARINGHOUSE ACCESSION NUMBER: JC740337

PUBLICATION DATE: JUN 74

TITLE: THE COLLEGE AND THE ENERGY CRISIS.

PERSONAL AUTHOR: DOUGLASS, DONALD D.

DESCRIPTOR: *COLLEGE ROLE; *COMMUNITY COLLEGES; *ELECTRICITY; *ENERGY CONSERVATION; *FUEL CONSUMPTION; JUNIOR COLLEGES; POST SECONDARY EDUCATION; SPEECHES; NEBRASKA; *YORK COLLEGE

EDRS PRICE: EDRS PRICE MF-$0.75 HC-$1.50 PLUS POSTAGE

DESCRIPTIVE NOTE: 8P.; PAPER PRESENTED AT MIDDLE ATLANTIC STATES TWO-YEAR COLLEGE CONFERENCE (JUNE 1974)

ISSUE: RIEJAN75

ABSTRACT: WAYS IN WHICH COLLEGES CAN CONSERVE ENERGY ARE DISCUSSED. REDUCTION IN THE USE OF HEAT AND LIGHT CAN BE ACCOMPLISHED BY TAKING SEVERAL STEPS, SUCH AS REDUCING THE AMOUNT OF FRESH AIR INTRODUCED INTO HEATING SYSTEMS, TURNING OFF VENTILATING FANS AT NIGHT, CUTTING TEMPERATURES BACK DURING VACATION PERIODS AND BREAKS, LOWERING THE TEMPERATURE OF THE HOT WATER IN THE BUILDINGS, INSTALLING WATER FLOW RESTRICTERS, DECREASING BOTH INTERIOR AND EXTERIOR LIGHTING, AND RESCHEDULING CLASSES SO THAT BUILDINGS ARE NOT HEATED FOR A FEW STUDENTS. YORK COLLEGE'S PROGRAM TO CONSERVE ENERGY IS DESCRIBED. (DB)

ACCESSION NUMBER: ED096130

CLEARINGHOUSE ACCESSION NUMBER: SE018032

PUBLICATION DATE: 30 JUN 73

TITLE: ENERGY RELATIONSHIPS.

PERSONAL AUTHOR: HENDERSON, PAULA

INSTITUTION CODE: 88808747; EYV2U775

SPONSORING AGENCY CODE: FGK57295

DESCRIPTOR: *AUTOINSTRUCTIONAL PROGRAMS; *ECOLOGY; ENERGY; INSTRUCTION; *INSTRUCTIONAL MATERIALS; SCIENCE EDUCATION; *SECONDARY SCHOOL SCIENCE; TEACHER DEVELOPED MATERIALS; UNITS OF STUDY (SUBJECT FIELDS); *DEL MOD SYSTEM

EDRS PRICE: EDRS PRICE MF-$0.75 HC-$1.50 PLUS POSTAGE

DESCRIPTIVE NOTE: 6P.

ISSUE: RIEJAN75

ABSTRACT: THIS AUTOINSTRUCTIONAL PROGRAM DEALS WITH THE STUDY OF ENERGY RELATIONSHIPS AS THEY OCCUR IN THE SUBJECT ECOLOGY. IT IS RECOMMENDED FOR STUDY IN GRADE 10 FOR MIDDLE LEVEL ACHIEVERS. NO PREREQUISITES ARE LISTED. BEHAVIORAL OBJECTIVES ARE SUGGESTED. THE EQUIPMENT NEEDED TO BE USED WITH THE STUDENT SCRIPT SUPPLIED IS LISTED. TEN MINUTES IS GIVEN AS THE SUGGESTED TIME NEEDED. (EB)

REPORT NUMBER: NSF-GW-6703

INSTITUTION NAME: DELAWARE STATE DEPT. OF PUBLIC INSTRUCTION, DOVER.; DEL MOD SYSTEM, DOVER, DEL.

SPONSORING AGENCY NAME: NATIONAL SCIENCE FOUNDATION, WASHINGTON, D.C.

ACCESSION NUMBER: ED096154

CLEARINGHOUSE ACCESSION NUMBER: SE018073

PUBLICATION DATE: MAY 74

TITLE: ENERGY, ENVIRONMENT, PRODUCTIVITY. PROCEEDINGS OF THE FIRST SYMPOSIUM ON RANN: RESEARCH APPLIED TO NATIONAL NEEDS, NOVEMBER 1973.

PERSONAL AUTHOR: HOLMES, JAY, ED.

INSTITUTION CODE: 88810350

DESCRIPTOR: *ECONOMICS; *ENERGY; *ENVIRONMENT; PROGRAM DESCRIPTIONS; PUBLIC POLICY; *SCIENTIFIC RESEARCH

EDRS PRICE: EDRS PRICE MF-$0.75 HC-$12.60 PLUS POSTAGE

DESCRIPTIVE NOTE: 253P.

ISSUE: RIEJAN75

ABSTRACT: THIS VOLUME RECORDS THE PRESENTATIONS MADE AT THE SYMPOSIUM ON RESEARCH APPLIED TO NATIONAL NEEDS. THE THREE MAJOR PROBLEM AREAS OF ENERGY, THE ENVIRONMENT, AND PRODUCTIVITY SERVE AS A FOCUS FOR THE PAPERS. THE 14 PAPERS IN THE FIRST SECTION DEAL WITH ENERGY PROGRAMS; ENERGY UNDER THE OCEAN; ENERGY CONVERSION AND TRANSMISSION SYSTEMS; AND GEOTHERMAL, WIND, AND SOLAR ENERGY. THE SECOND SECTION INCLUDES 10 PAPERS COVERING THREATS TO MAN AND HIS

ENVIRONMENT, ENVIRONMENTAL PROGRAMS AND PROJECTS, DISASTER MITIGATION (EARTHQUAKE ENGINEERING AND FIRE RESEARCH), MERCURY POLLUTION, WEATHER MODIFICATION, AND RESOURCE MANAGEMENT. THE THIRD SECTION CONTAINS THREE POLICY ADDRESSES WHICH DISCUSS NATIONAL RESEARCH, ENERGY POLICY, AND ENVIRONMENTAL POLICY. TWELVE PAPERS IN SECTION 4 ARE CONCERNED WITH PRODUCTIVITY IN THE PUBLIC AND PRIVATE SECTORS; THE FINAL SECTION CONSISTS OF ONE PAPER ON RESEARCH UTILIZATION. (DT)

AVAILABILITY: SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON, D.C. 20402 (STOCK NO. 3600-00177, $3.40)

INSTITUTION NAME: NATIONAL SCIENCE FOUNDATION, WASHINGTON, D.C. RANN PROGRAM.

ACCESSION NUMBER: ED096733

CLEARINGHOUSE ACCESSION NUMBER: EA006407

PUBLICATION DATE: OCT 74

TITLE: CASE STUDIES OF ENERGY USE: ELEMENTARY AND SECONDARY SCHOOLS. BSIC/EFL ENERGY WORKBOOK NO. 1.

INSTITUTION CODE: BBB02923

DESCRIPTORS: BUILDING DESIGN; *BUILDING OPERATION; CASE STUDIES; *CLIMATE CONTROL; *COMPARATIVE ANALYSIS; COMPUTER PROGRAMS; DESIGN BUILD APPROACH; ELEMENTARY SCHOOLS; *ENERGY CONSERVATION; *FUEL CONSUMPTION; SCHOOL MAINTENANCE; SECONDARY SCHOOLS; SIMULATION; TABLES (DATA); LIFE CYCLE COST ANALYSIS

EDRS PRICE: EDRS PRICE MF-$0.75 HC-$1.50 PLUS POSTAGE

DESCRIPTIVE NOTE: 24P.; A RELATED DOCUMENT IS EA 006 323

ISSUE: RIEFEB75

ABSTRACT: THIS REPORT IS THE FIRST IN A SERIES OF ENERGY USE STUDIES INTENDED TO PROVIDE REAL LIFE EXAMPLES OF THE IMPLICATION OF ENERGY CONSERVATION PRACTICES. RESEARCH REPORTS FROM FIVE PUBLIC SCHOOL DISTRICTS DESCRIBING THEIR METHODS OF MEASURING AND CONSERVING ENERGY ARE SUMMARIZED. WHILE INVESTIGATING THE RESPONSES OF VARIOUS SCHOOL DISTRICTS TO THE ENERGY CRISIS, BSIC ARRIVED AT SOME CONCLUSIONS REGARDING THE CURRENT ENERGY SITUATION AND THE POSSIBILITY OF COPING WITH IT BY RATIONAL PROCEDURES. THESE CONCLUSIONS, DISCUSSED IN THE FINAL SECTION, RELATE TO (1) THE PROBLEMS OF ANALYSIS USING EXISTING TOOLS, (2) THE NEED FOR DESIGN AND OPERATION ENERGY USE GUIDELINES, AND (3) THE NEED FOR MORE COMPLETE ENERGY USE STUDIES. (AUTHOR/MLF)

AVAILABILITY: BSIC/EFL, 3000 SAND HILL ROAD, MENLO PARK, CALIFORNIA 94025 ($2.00, POSTPAID)

INSTITUTION NAME: BUILDING SYSTEMS INFORMATION CLEARINGHOUSE, MENLO PARK, CALIF.

ACCESSION NUMBER: ED096747

CLEARINGHOUSE ACCESSION NUMBER: EA006421

PUBLICATION DATE: 74

TITLE: DESIGN CONCEPTS FOR OPTIMUM ENERGY USE IN HVAC SYSTEMS.

INSTITUTION CODE: BBB09415

DESCRIPTORS: AIR CONDITIONING; *CLIMATE CONTROL; CONTROLLED ENVIRONMENT; *DESIGN NEEDS; ELECTRICAL SYSTEMS; *ENERGY CONSERVATION; EQUIPMENT UTILIZATION; HEATING; LIGHTING; MECHANICAL EQUIPMENT; MERCHANDISE INFORMATION; TECHNOLOGY; VENTILATION; *DESIGN TECHNOLOGY; HEAT RECOVERY SYSTEMS; HVAC SYSTEMS

EDRS PRICE: EDRS PRICE MF-$0.75 HC-$1.85 PLUS POSTAGE

DESCRIPTIVE NOTE: 31P.

ISSUE: RIEFEB75

ABSTRACT: MUCH OF THE INNOVATIVE WORK IN THE DESIGN AND APPLICATION OF HEATING, VENTILATING, AND AIR CONDITIONING (HVAC) SYSTEMS IS CONCENTRATED ON IMPROVING THE COST EFFECTIVENESS OF SUCH SYSTEMS THROUGH OPTIMIZING ENERGY USE. ONE APPROACH TO THE PROBLEM IS TO REDUCE A BUILDING'S HVAC ENERGY DEMANDS BY DESIGNING IT FOR LOWER HEAT GAINS AND LOSSES IN THE FIRST PLACE. ANOTHER APPROACH TAKEN BY DESIGNERS IN RESPONSE TO THEIR AWARENESS OF THE NEED TO OPTIMIZE HVAC ENERGY HAS BEEN TO SEEK NEW SYSTEMS AND EQUIPMENT. THIS BOOKLET IS A CONCEPTUAL REVIEW OF THE STATE OF THE ART OF HVAC SYSTEMS AND COMPONENTS THAT HAVE COME OUT OF CONTINUING EFFORTS TOWARD MORE EFFICIENT USE OF ENERGY THROUGH TECHNOLOGY. (AUTHOR/MLF)

AVAILABILITY: ELECTRIC ENERGY ASSOCIATION, 90 PARK AVENUE, NEW YORK, NEW YORK 10016 (FREE)

INSTITUTION NAME: ELECTRIC ENERGY ASSOCIATION, NEW YORK, N.Y.

ACCESSION NUMBER: ED097212

CLEARINGHOUSE ACCESSION NUMBER: SE018218

PUBLICATION DATE: MAR 74

TITLE: ELECTRICAL PRODUCTION AND POLLUTION CONTROL. ENVIRONMENTAL EDUCATION CURRICULUM.

INSTITUTION CODE: KUJ24608

SPONSORING AGENCY CODE: BBB00077

DESCRIPTORS: CONSERVATION EDUCATION; *CURRICULUM GUIDES; ELECTRICITY; *ENERGY; *ENVIRONMENT; *ENVIRONMENTAL EDUCATION; INSTRUCTION; INSTRUCTIONAL MATERIALS; LEARNING ACTIVITIES; LIGHTING; NATURAL RESOURCES; *SECONDARY SCHOOL SCIENCE; TECHNOLOGY; ELECTRICAL PRODUCTION; ELEMENTARY SECONDARY EDUCATION ACT TITLE III; ESEA TITLE III; *POLLUTION CONTROL

EDRS PRICE: EDRS PRICE MF-$0.75 HC-$5.40 PLUS POSTAGE

DESCRIPTIVE NOTE: 120P.; BEST COPY AVAILABLE; OCCASIONAL MARGINAL LEGIBILITY

ISSUE: RIEFEB75

ABSTRACT: CITIZEN USE OF OUR NATION'S INDUSTRIAL PRODUCTS HAS LED TO INCREASED POLLUTION PROBLEMS AND DEMAND FOR DIMINISHING ENERGY RESERVES. IN AN ATTEMPT TO ENCOURAGE INTELLIGENT COOPERATION AMONG SCIENCE, INDUSTRY, GOVERNMENT AND ALL CITIZENS, THIS UNIT WAS DEVELOPED TO INTRODUCE SECONDARY SCIENCE STUDENTS TO THE MANY FACETS OF THE ELECTRICAL PRODUCTION INDUSTRY. IT FOCUSES ON ONE PLANT--THE LAWRENCE KANSAS POWER AND LIGHT GENERATING STATION--WHICH PROVIDES EXAMPLES OF THE MACHINERY USED TO PRODUCE ELECTRICITY AND METHODS FOR CONTROLLING MUCH OF THE RESULTING POLLUTION. THE MODULE DISCUSSES USES OF ELECTRICITY, PROBLEMS AND SOLUTIONS OF POLLUTION CONTROL, ECONOMICS AND THE ELECTRICAL INDUSTRY, NUCLEAR ENERGY AND ENERGY SHORTAGES. A SUGGESTED TIME LINE IS PROVIDED SEQUENCING EVENTS LEADING TO THE TRIP TO THE PLANT. ALSO INCLUDED ARE LISTS AND DESCRIPTIONS OF MATERIALS NEEDED AND SUGGESTIONS OF APPROPRIATE METHODOLOGIES AND GUIDELINES FOR THE FIELD TRIP. APPENDICES INCLUDE A GLOSSARY OF TERMS AND PATTERNS FOR DEVELOPING RELATING TRANSPARENCIES. (ML8)

INSTITUTION NAME: TOPEKA PUBLIC SCHOOLS, KANS.

SPONSORING AGENCY NAME: BUREAU OF ELEMENTARY AND SECONDARY EDUCATION (DHEW/OE), WASHINGTON, D.C.

ACCESSION NUMBER: ED098096

CLEARINGHOUSE ACCESSION NUMBER: SO007866

PUBLICATION DATE: 74

TITLE: RESOURCE RECOVERY OVERVIEW TEACHER'S GUIDE ; RESOURCE RECOVERY AND YOU STUDENT BOOK . RESOURCE RECOVERY EDUCATION PROGRAM.

INSTITUTION CODE: BBB10935; FGK56325

DESCRIPTORS: CAREER EDUCATION; *CONSERVATION (ENVIRONMENT); *ECOLOGY; ENERGY; *ENVIRONMENTAL EDUCATION; FUTURES (OF SOCIETY); INTERDISCIPLINARY APPROACH; *NATURAL RESOURCES; PROGRAM DESCRIPTIONS; RECYCLING; RESOURCE MATERIALS; SECONDARY EDUCATION; TEACHING METHODS; *WASTE DISPOSAL

EDRS PRICE: EDRS PRICE MF-$0.76 HC NOT AVAILABLE FROM EDRS. PLUS POSTAGE

DESCRIPTIVE NOTE: 56P.; RELATED DOCUMENTS ARE SO 007 867, 868, AND 870

ISSUE: RIEMAR75

ABSTRACT: THE RESOURCE RECOVERY EDUCATION PROGRAM CONTAINS A VARIETY OF IDEAS, APPROACHES, AND LEARNING AIDS FOR TEACHING ABOUT SOLID WASTE DISPOSAL AT THE SECONDARY LEVEL. THE PROGRAM KIT CONSISTS OF A TEACHER'S GUIDE WHICH PROVIDES AN OVERVIEW; SEPARATE TEACHER'S GUIDES FOR SOCIAL STUDIES, SCIENCE, AND INDUSTRIAL ARTS; A STUDENT BOOKLET OF READINGS; AND A WALL CHART. EACH OF THE COMPONENTS CAN BE USED INDEPENDENTLY OF THE OTHERS. THE PROGRAM IS INTENDED TO INTRODUCE STUDENTS TO THE PROBLEM OF SOLID WASTE DISPOSAL AND TO INVOLVE THEM IN DOING SOMETHING ABOUT IT. TEACHING STRATEGIES INVOLVE THE STUDENT IN COMMUNITY STUDIES, RESEARCH, AND CLASSROOM DISCUSSION. THE TEACHER'S GUIDE AND THE STUDENT BOOK ARE AVAILABLE IN THIS DOCUMENT. FOR OTHER COMPONENTS OF THE PROGRAM SEE THE RELATED DOCUMENTS LISTED IN THE DESCRIPTIVE NOTE. THE TEACHER'S GUIDE DISCUSSES THE NEED FOR TEACHING ABOUT SOLID WASTE DISPOSAL AND THE APPROACH TO CONTENT USED IN THE PROGRAM. IT ALSO DESCRIBES THE SIX COMPONENTS OF THE PROGRAM, THE UNIT TOPICS, AND SPECIFIC OBJECTIVES AND PRESENTS INFORMATION ON ENVIRONMENTAL CAREERS AND INDUSTRIAL RESOURCES. THE STUDENT BOOKLET CONTAINS A FICTIONAL STORY FOLLOWED BY A SECTION ON BASIC ENVIRONMENTAL PRINCIPLES, A LIST OF ORGANIZATIONS THAT MAKE AVAILABLE FREE AND LOW-COST MATERIALS, AND A GLOSSARY OF TERMS. (AUTHOR/RM)

AVAILABILITY: NATIONAL ASSOCIATION OF SECONDARY SCHOOL PRINCIPALS, 1904 ASSOCIATION DRIVE, RESTON, VIRGINIA 22091 ($12.00 FOR KIT, 20 PERCENT DISCOUNT ON ORDERS OF FIVE OR MORE)

INSTITUTION NAME: NATIONAL ASSOCIATION OF SECONDARY SCHOOL PRINCIPALS, WASHINGTON, D.C.; NATIONAL CENTER FOR RESOURCE RECOVERY, INC., WASHINGTON, D.C.

ACCESSION NUMBER: ED098100

CLEARINGHOUSE ACCESSION NUMBER: SO007870

PUBLICATION DATE: 74

TITLE: TEACHING RESOURCE RECOVERY IN SOCIAL STUDIES. RESOURCE RECOVERY EDUCATION PROGRAM.

INSTITUTION CODE: BBB10935; FGK56325

DESCRIPTORS: CLASS ACTIVITIES; COMMUNITY STUDY; *CONSERVATION (ENVIRONMENT); COURSE OBJECTIVES; *ECOLOGY; ECONOMIC FACTORS; ENERGY CONSERVATION; *ENVIRONMENTAL EDUCATION; INTERDISCIPLINARY APPROACH; POLITICAL ISSUES; QUESTIONING TECHNIQUES; RESOURCE MATERIALS; SECONDARY EDUCATION; SOCIAL PROBLEMS; *SOCIAL STUDIES; TEACHING METHODS; *WASTE DISPOSAL

EDRS PRICE: EDRS PRICE MF-$0.76 HC NOT AVAILABLE FROM EDRS. PLUS POSTAGE

DESCRIPTIVE NOTE: 13P.; RELATED DOCUMENTS ARE SO 007 866-868

ISSUE: RIEMAR75

ABSTRACT: THIS GUIDE, ONE COMPONENT OF THE RESOURCE

RECOVERY EDUCATION KIT (SEE SO 007 866 FOR A DESCRIPTION); CONTAINS IDEAS AND ACTIVITIES FOR TEACHING ABOUT SOLID WASTE DISPOSAL IN SECONDARY LEVEL SOCIAL STUDIES CLASSES. AMONG THE COURSE OBJECTIVES ARE THE FOLLOWING: (1) TO EXPLORE THE IMPACT OF OUR SOCIETY ON THE PROBLEM OF SOLID WASTE AND THE NEED FOR EFFECTIVE MANAGEMENT; (2) TO ENCOURAGE STUDENT ACTIVITIES AND INVOLVEMENT IN ENVIRONMENT CONSERVATION; (3) TO EXAMINE TECHNOLOGICAL DEVELOPMENTS WHICH CAN REDUCE THE PROBLEMS AND COSTS OF REFUSE COLLECTION; AND (4) TO BECOME AWARE OF HOW LOCAL ECONOMIC, POLITICAL, AND SOCIAL PROBLEMS ARE RELATED TO SOLID WASTE DISPOSAL AND HOW LOCAL SITUATIONS DIFFER. TEACHING STRATEGIES INCLUDE HAVING STUDENTS CONDUCT INTERVIEWS, POLLS, AND STUDIES OF THE LOCAL COMMUNITY AND CLASSROOM DISCUSSION. THE GUIDE CONSISTS OF FIVE MAJOR STUDY UNITS: (1) SOLID WASTE: A GROWING PROBLEM; (2) COLLECTION AND TRANSPORTATION; (3) DISPOSAL; (4) RESOURCE RECOVERY; AND (5) SOLID WASTE MANAGEMENT SYSTEMS. OBJECTIVES, STUDENT ACTIVITIES, QUESTIONS FOR DISCUSSION AND RESEARCH, BASIC UNDERSTANDINGS TO BE DEVELOPED, AND INSTRUCTIONAL RESOURCES ARE PROVIDED FOR EACH UNIT. (AUTHOR/RM)

AVAILABILITY: NATIONAL ASSOCIATION OF SECONDARY SCHOOL PRINCIPALS, 1904 ASSOCIATION DRIVE, RESTON, VIRGINIA 22091 ($12.00 FOR KIT, 20 DISCOUNT ON ORDERS OF FIVE OR MORE)

INSTITUTION NAME: NATIONAL ASSOCIATION OF SECONDARY SCHOOL PRINCIPALS, WASHINGTON, D.C.; NATIONAL CENTER FOR RESOURCE RECOVERY, INC., WASHINGTON, D.C.

ACCESSION NUMBER: ED098112

CLEARINGHOUSE ACCESSION NUMBER: SO007891

PUBLICATION DATE: JAN 74

TITLE: WORLD TRENDS AND ALTERNATIVE FUTURES. OPEN GRANTS PAPERS NO. 1.

PERSONAL AUTHOR: MCHALE, JOHN; CORDELL, MAGDA

INSTITUTION CODE: BBB03531

DESCRIPTOR: DECISION MAKING; ENERGY; FOOD; *FUTURES (OF SOCIETY); *GLOBAL APPROACH; NATURAL RESOURCES; PLANNING; POPULATION TRENDS; PREDICTION; *SOCIAL CHANGE; TECHNOLOGICAL ADVANCEMENT; *TREND ANALYSIS; URBANIZATION; *WORLD AFFAIRS; WORLD PROBLEMS

EDRS PRICE: EDRS PRICE MF-$0.76 HC-$1.95 PLUS POSTAGE

DESCRIPTIVE NOTE: 47P.

ISSUE: RIEMAR75

ABSTRACT: WE ARE NOW AT A STAGE IN HUMAN GLOBAL DEVELOPMENT IN WHICH THE CONTINUOUS REVIEW AND ASSESSMENT OF THE LONG-RANGE FUTURE IMPLICATIONS OF OUR PAST AND PRESENT ACTIONS BECOMES CRUCIALLY IMPORTANT FOR THE SURVIVAL OF HUMAN SOCIETY. THIS REPORT INCLUDES A SYNOPTIC VIEW OF WORLD TRENDS AND ALTERNATIVE FUTURES. THE FIRST AND MAJOR PORTION OF THE PUBLICATION DISCUSSES WORLD TRENDS INCLUDING BOTH LONG-TERM AND SHORT-TERM CHANGES: (1) EVOLUTIONARY INTERVENTION; (2) PHYSICAL EXTENSION; (3) CONCEPTUAL AND SOCIAL EXPANSION; (4) MAJOR TECHNOLOGICAL CHANGE EVENTS; (5) POPULATION; (6) URBAN GROWTH; (7) ENERGY; (8) INDUSTRIAL DEVELOPMENT AND NATURAL RESOURCES; (9) FOOD; (10) MATERIAL DISPARITY BETWEEN ADVANCED AND LESSER DEVELOPED NATIONS; (11) THE WORLD ECONOMY; AND (12) THE POLITICAL CLIMATE. THE SECOND PART OF THE DOCUMENT DISCUSSES ASPECTS OF ALTERNATIVE FUTURES IN TERMS OF WHAT WE OUGHT TO DO. (AUTHOR/RM)

INSTITUTION NAME: HAWAII UNIV., HONOLULU. EAST-WEST CENTER.

ACCESSION NUMBER: ED098625

CLEARINGHOUSE ACCESSION NUMBER: CS500836

PUBLICATION DATE: APR 74

TITLE: POWER *FOR* THE PEOPLE: THE EFFECTS OF A DIFFUSION CAMPAIGN ON A COMMUNITY.

PERSONAL AUTHOR: ALLEN, RICHARD K.

DESCRIPTOR: *COMMUNICATION (THOUGHT TRANSFER); COMMUNITY ACTION; COMMUNITY INVOLVEMENT; *COMMUNITY STUDY; *DIFFUSION; *ENERGY; HIGHER EDUCATION; *INFORMATION DISSEMINATION; MODELS; *MICHIGAN; MIDLAND

EDRS PRICE: EDRS PRICE MF-$0.76 HC-$1.58 PLUS POSTAGE

DESCRIPTIVE NOTE: 9P.; PAPER PRESENTED AT THE ANNUAL MEETING OF THE INTERNATIONAL COMMUNICATION ASSOCIATION (NEW ORLEANS, LOUISIANA, APRIL 17-20, 1974)

ISSUE: RIEAPR75

ABSTRACT: THIS PAPER EXAMINES THE POWER AND ENERGY NEEDS OF A SMALL-TO-MEDIUM SIZED (35,000), ONE INDUSTRY, MIDWESTERN COMMUNITY AND HOW THAT COMMUNITY OVERCAME THE COMMUNICATION OBSTACLES WHICH PREVENTED FULFILLMENT OF ITS ENERGY NEEDS. THE PAPER OUTLINES THE BACKGROUND ON THE COMMUNICATION SITUATION BEING DESCRIBED, THEN PROVIDES A CHRONOLOGY OF THE KEY EVENTS FOLLOWED BY A DESCRIPTION OF THE EVENTS IN THE DIFFUSION PROCESS, AND CONCLUDES WITH AN ANALYSIS OF THE ENTIRE MATTER FROM THE INITIAL PROBLEM TO ITS FINAL SOLUTION. (RB)

ACCESSION NUMBER: ED099188

CLEARINGHOUSE ACCESSION NUMBER: SE017050

PROGRAM AREA: 95

PUBLICATION DATE: SEP 72

TITLE: ENVIRONMENTAL STUDIES IN THE PHYSICAL SCIENCES. PROJECT REPORTS, VOLUME 3, THE RACHEL CARSON PROJECT.

PERSONAL AUTHOR: TANNER, R. THOMAS

INSTITUTION CODE: BBB05225

SPONSORING AGENCY CODE: BBB05608

DESCRIPTOR: CONSERVATION EDUCATION; CURRICULUM GUIDES; ENERGY; *ENVIRONMENTAL EDUCATION; *INSTRUCTIONAL MATERIALS; *INTERDISCIPLINARY APPROACH; LEARNING ACTIVITIES; NATURAL RESOURCES; PHYSICAL SCIENCES; *PROGRAM CONTENT; PROGRAM DESCRIPTIONS; SECONDARY EDUCATION; TEACHING GUIDES; *RACHEL CARSON PROJECT

EDRS PRICE: EDRS PRICE MF-$0.76 HC-$4.43 PLUS POSTAGE

DESCRIPTIVE NOTE: 77P.; RELATED DOCUMENTS ARE SE 017 047-054

ISSUE: RIEAPR75

ABSTRACT: THIS DOCUMENT IS THE THIRD OF SEVEN ACCOMPANYING VOLUMES INCLUDED IN THE RACHEL CARSON PROJECT. THE PROJECT ATTEMPTS TO INTRODUCE ENVIRONMENTAL EDUCATION LESSONS AND UNITS INTO EXISTING COURSES OF STUDY WITHIN A HIGH SCHOOL RATHER THAN TO IMPLEMENT ENVIRONMENTAL EDUCATION THROUGH THE INTRODUCTION OF NEW COURSES. THIS VOLUME REPORTS THE ENVIRONMENTALLY-RELATED ACTIVITIES IMPLEMENTED IN A PHYSICS AND A CHEMISTRY PROGRAM BY TWO OF THE TEACHERS INVOLVED IN THE PROJECT. THE PHYSICS UNIT CONCENTRATES ON A STUDY OF ENERGY BEGINNING WITH AN INTRODUCTION OF THE VARIOUS FORMS OF ENERGY, I.E., KINETIC, POTENTIAL, WORK, AND HEAT. NEXT IS AN EXAMINATION OF THE FIRST LAW OF THERMODYNAMICS AND ITS APPLICATION TO STEAM ENGINES AND POWER SOURCES. THE UNIT CONCLUDES WITH AN INQUIRY INTO THE ENVIRONMENTAL IMPACT OF ENERGY USE. A BIBLIOGRAPHY OF THE TEXTS AND MATERIALS USED IS INCLUDED. THE CHEMISTRY UNIT CONSISTS OF ENVIRONMENTAL PROJECTS IN THREE AREAS: LITERATURE RESEARCH, MODEL BUILDING, AND FIELD RESEARCH. IT INCLUDES EXAMPLES OF BOOK REPORTS, AN EXAMPLE OF A STUDENT INVESTIGATION OF THE WATER QUALITY OF STREAMS IN THE AREA, AND A STUDENT PROJECT INVOLVING THE CONSTRUCTION OF AN ELECTROSTATIC PRECIPITATOR. (RLB)

GRANT NUMBER: OEG-0-71-4623

BUREAU NUMBER: BR-1-0839

INSTITUTION NAME: CORVALLIS SCHOOL DISTRICT 509J, OREG.

SPONSORING AGENCY NAME: OFFICE OF EDUCATION (DHEW), WASHINGTON, D.C. OFFICE OF ENVIRONMENTAL EDUCATION.

ACCESSION NUMBER: ED099199

CLEARINGHOUSE ACCESSION NUMBER: SE017349

PUBLICATION DATE: 73

TITLE: A TEACHER'S GUIDE FOR THE ENVIRONMENTAL IMPACT OF ELECTRICAL POWER GENERATION: NUCLEAR AND FOSSIL. A MINICOURSE FOR SECONDARY SCHOOLS AND ADULT EDUCATION. TEACHER'S GUIDE.

PERSONAL AUTHOR: MCDERMOTT, JOHN J., ED.

INSTITUTION CODE: BBB09096

SPONSORING AGENCY CODE: XIE04835

DESCRIPTOR: ADULT EDUCATION; CONSERVATION EDUCATION; ECONOMICS; *ENERGY; *ENVIRONMENTAL EDUCATION; ENVIRONMENTAL INFLUENCES; FUELS; *INSTRUCTIONAL MATERIALS; INTERDISCIPLINARY APPROACH; POLLUTION; SCIENCE EDUCATION; *SECONDARY GRADES; *TEACHING GUIDES; ATOMIC ENERGY; *ELECTRIC POWER GENERATION; NUCLEAR ENERGY

EDRS PRICE: EDRS PRICE MF-$0.76 HC-$8.24 PLUS POSTAGE

DESCRIPTIVE NOTE: 167P.; FOR THE TEXT, SEE SE 017 350

ISSUE: RIEAPR75

ABSTRACT: ACCORDING TO THIS GUIDE, THE MAJOR GOAL OF THIS MINICOURSE, DEVELOPED FOR SECONDARY AND ADULT EDUCATION, IS TO HAVE THE STUDENT GATHER PERTINENT INFORMATION RELATIVE TO THE GENERATION OF ELECTRICAL ENERGY AND TO DRAW HIS OWN CONCLUSIONS CONCERNING THE NEED FOR THIS ENERGY SUPPLY. IF IN HIS MIND SUCH A NEED EXISTS, HE SHOULD MAKE A JUDGMENT AS TO THE METHODS BY WHICH THE ENERGY SHOULD BE PRODUCED. THE JOB OF THE TEACHER IS TO "TELL IT LIKE IT IS" AND THEN TO ENCOURAGE THE STUDENT TO MAKE HIS OWN JUDGMENTS BASED ON THE EVALUATION OF THIS INFORMATION. EACH CHAPTER OF THIS TEACHER'S GUIDE CORRESPONDS TO A CHAPTER IN THE TEXT. THERE ARE FIVE SECTIONS IN EACH CHAPTER DEALING WITH BEHAVIORAL OBJECTIVES, SUGGESTED ACTIVITIES FOR THAT CHAPTER, AUDIOVISUAL AIDS, REFERENCES, AND SELECTED READINGS TO PROVIDE BACKGROUND MATERIAL FOR THE TEACHER. AT THE END OF THE TEACHER'S GUIDE IS A DECISION-MAKING MODEL TO HELP THE READER ANALYZE THE INFORMATION HE HAS RECEIVED. THERE ARE THREE APPENDIXES: THE FIRST CONCERNING LABORATORY SAFETY RULES FOR WORKING WITH RADIOACTIVE SUBSTANCES, THE SECOND CONTAINING NAMES AND ADDRESSES OF ENVIRONMENTAL ACTION ORGANIZATIONS, AND THE THIRD AN ACHIEVEMENT TEST. (BT)

REPORT NUMBER: WASH-1262

INSTITUTION NAME: PENNSYLVANIA STATE DEPT. OF EDUCATION, HARRISBURG. BUREAU OF CURRICULUM SERVICES.

SPONSORING AGENCY NAME: ATOMIC ENERGY COMMISSION, OAK RIDGE, TENN. DIV. OF NUCLEAR EDUCATION AND TRAINING.

ACCESSION NUMBER: ED099200

CLEARINGHOUSE ACCESSION NUMBER: SE017350

PUBLICATION DATE: 73

TITLE: THE ENVIORNMENTAL IMPACT OF ELECTRICAL POWER GENERATION: NUCLEAR AND FOSSIL. A MINICOURSE FOR SECONDARY SCHOOLS AND ADULT EDUCATION. TEXT.

PERSONAL AUTHOR: MCDERMOTT, JOHN J., ED.

INSTITUTION CODE: BBB09096

SPONSORING AGENCY CODE: XIE04835

DESCRIPTOR: ADULT EDUCATION; CONSERVATION EDUCATION; ECONOMICS; *ENERGY; *ENVIRONMENTAL EDUCATION; ENVIRONMENTAL INFLUENCES; FUELS; *INSTRUCTIONAL MATERIALS; INTERDISCIPLINARY APPROACH; *NATURAL RESOURCES; POLLUTION; SCIENCE EDUCATION; *SECONDARY GRADES; ATOMIC ENERGY; *ELECTRIC POWER GENERATION; NUCLEAR ENERGY

EDRS PRICE: EDRS PRICE MF-$0.76 HC-$4.43 PLUS POSTAGE

DESCRIPTIVE NOTE: 97P.; FOR THE TEACHER'S GUIDE, SEE SE 017 349

ISSUE: RIEAPR75

ABSTRACT: THIS COURSE, DEVELOPED FOR USE IN SECONDARY AND ADULT EDUCATION, IS AN EFFORT TO DESCRIBE THE COST-BENEFIT RATIO OF THE VARIOUS METHODS OF GENERATION OF ELECTRICAL POWER IN AN ERA WHEN THE REQUIREMENT FOR ADDITIONAL SOURCES OF POWER IS GROWING AT AN EVER-INCREASING RATE AND ENVIRONMENTAL PROTECTION IS A MAJOR CONCERN. THIS COURSE WAS WRITTEN AND COMPILED BY AN INDEPENDENT COMMITTEE DRAWN FROM EDUCATORS, ENGINEERS, HEALTH PHYSICISTS, MEMBERS OF INDUSTRY AND CONSERVATION GROUPS, AND ENVIRONMENTAL SCIENTISTS. AMONG THE TOPICS DISCUSSED ARE THE INCREASING NEED FOR ELECTRICAL POWER AND METHODS FOR MEETING THIS NEED, NUCLEAR POWER AND FOSSIL FUELED PLANTS, THE BIOLOGICAL EFFECTS OF NUCLEAR AND FOSSIL FUELED PLANTS, WASTES IN THE PRODUCTION OF ELECTRIC POWER, PLANT SITE CONSIDERATIONS, ENERGY CONSERVATION, AND THE ENVIRONMENTAL EFFECTS OF ELECTRICAL POWER GENERATION. THE APPENDIXES INCLUDE A GLOSSARY OF TERMS, A BIBLIOGRAPHY, A DECISION-MAKING MODEL AND A BRIEF OUTLINE OF THE PROCEDURES WHICH MUST BE FOLLOWED BY A UTILITY IN ORDER TO CONSTRUCT AND OPERATE A NUCLEAR POWER PLANT. (BT)

INSTITUTION NAME: PENNSYLVANIA STATE DEPT. OF EDUCATION, HARRISBURG. BUREAU OF CURRICULUM SERVICES.

SPONSORING AGENCY NAME: ATOMIC ENERGY COMMISSION, OAK RIDGE, TENN. DIV. OF NUCLEAR EDUCATION AND TRAINING.

ACCESSION NUMBER: ED099236

CLEARINGHOUSE ACCESSION NUMBER: SE018449

PUBLICATION DATE: 74

TITLE: RESOURCES UNIT, EDMONDS SCHOOL DISTRICT.

INSTITUTION CODE: BBBG0159

DESCRIPTOR: CONSERVATION EDUCATION; DEPLETED RESOURCES; ECOLOGY; EDUCATIONAL PROGRAMS; ENERGY; *ENVIRONMENTAL EDUCATION; *INSTRUCTIONAL MATERIALS; INTERDISCIPLINARY APPROACH; *LEARNING ACTIVITIES; *NATURAL RESOURCES; OUTDOOR EDUCATION; POLLUTION; RECYCLING; SCIENCE EDUCATION; *SECONDARY GRADES; SOIL SCIENCE

EDRS PRICE: EDRS PRICE MF-$0.76 HC-$3.32 PLUS POSTAGE

DESCRIPTIVE NOTE: 75P.

ISSUE: RIEAPR75

ABSTRACT: THIS INTERDISCIPLINARY PROGRAM, DEVELOPED FOR SECONDARY STUDENTS, CONTAINS 13 NATURAL RESOURCE ACTIVITIES THAT CAN EITHER BE USED DIRECTLY IN, OR AS A SUPPLEMENT TO, CURRICULUM IN SCIENCE, PHOTOGRAPHY, MATHEMATICS, SOCIAL STUDIES AND ENGLISH. THE TOPICS TO BE INVESTIGATED INCLUDE: RAINDROP IMPACT, RESOURCE CONTROL, RECYCLING, THE WORLD MODEL, ELEMENTS, WATER RETENTION, CHARTING, THE USE OF ELECTRICITY, NUCLEAR POWER PLANTS, SOIL FERTILIZER AND PH. EACH LEARNING ACTIVITY INCLUDES: SUBJECT AREA AND GRADE LEVEL FOR WHICH IT CAN BE USED, LEVEL VI OBJECTIVES, TIME SCHEDULE FOR PRELAB AND PERFORMANCE OF THE ACTIVITY, BACKGROUND INFORMATION FOR THE TEACHER AND A LISTING OF MATERIALS NEEDED. A LISTING OF SUGGESTED FILMS IS INCLUDED. (BT)

INSTITUTION NAME: EDMONDS SCHOOL DISTRICT 15, LYNNWOOD, WASH.

ACCESSION NUMBER: ED099962

CLEARINGHOUSE ACCESSION NUMBER: EA006578

PUBLICATION DATE: 15 AUG 74

TITLE: LOW ENERGY UTILIZATION SCHOOL: RESEARCH, DESIGN, CONSTRUCTION, AND EVALUATION. PHASE 1: INTERIM REPORT.

PERSONAL AUTHOR: STEIN, RICHARD G.; STEIN, CARL

INSTITUTION CODE: BBB11082

SPONSORING AGENCY CODE: BBB10350; UPX60360

DESCRIPTOR: *ARCHITECTURAL PROGRAMING; *ARCHITECTURAL RESEARCH; ELECTRICITY; *ENERGY CONSERVATION; *FACILITY CASE STUDIES; FACILITY GUIDELINES; FUEL CONSUMPTION; ILLUMINATION LEVELS; MECHANICAL EQUIPMENT; PERFORMANCE CRITERIA; *SCHOOL DESIGN; SCHOOL PLANNING; SOLAR RADIATION; VENTILATION

EDRS PRICE: EDRS PRICE MF-$0.76 HC-$14.59 PLUS POSTAGE

DESCRIPTIVE NOTE: 297P.

ISSUE: RIEMAY75

ABSTRACT: THE PURPOSE OF THIS STUDY WAS TO ESTABLISH MORE PRECISELY WHAT FACTORS DETERMINE ENERGY USE IN SCHOOLS, TO EVALUATE THE EFFICIENCY OF AND NECESSITY FOR THESE, AND TO MAKE RECOMMENDATIONS FOR THE REDUCTION OF ENERGY USE. THESE RECOMMENDATIONS WILL BE APPLIED TO THE DESIGN OF SPECIFIC PROJECTS THAT WILL BE BUILT, MONITORED, AND EVALUATED. THIS REPORT COVERS THE PRE-DESIGN RESEARCH PHASE. DATA SOURCES FOR THE STUDY INCLUDE NEW YORK CITY SCHOOLS, FIVE SUBURBAN SCHOOL SYSTEMS IN THE NEW YORK CITY REGION, AND 31 ELECTRICALLY HEATED SCHOOLS IN THE NORTHEASTERN U.S. THE REPORT CONCLUDES THAT WITH RECOMMENDED NEW STANDARDS IN LIGHTING, VENTILATION, AND BUILDING DESIGN AND WITH UTILIZATION OF SOLAR ENERGY SCHOOLS CAN BE DESIGNED TO OPERATE WITH NO EDUCATIONAL PENALTY AT A SAVINGS OF FROM 25 TO 50 PERCENT OF THE MONITORED NEW YORK CITY LEVEL. (AUTHOR/MLF)

REPORT NUMBER: NSF-RA-N-74-117

AVAILABILITY: SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON, D.C. 20402 (STOCK NUMBER 3800-00194, $3.75)

INSTITUTION NAME: STEIN (RICHARD G.) AND ASSOCIATES, ARCHITECTS, NEW YORK, N.Y.

SPONSORING AGENCY NAME: NATIONAL SCIENCE FOUNDATION, WASHINGTON, D.C. RANN PROGRAM.; NEW YORK CITY BOARD OF EDUCATION, BROOKLYN, N.Y.

ACCESSION NUMBER: ED100003

CLEARINGHOUSE ACCESSION NUMBER: EA006622

PUBLICATION DATE: JUN 74

TITLE: SOLAR HEATING PROOF-OF-CONCEPT EXPERIMENT FOR A PUBLIC SCHOOL BUILDING. REPORT FOR THE PERIOD 15 JAN. 1974 TO 15 MAY 1974. NO. ER-7934.

INSTITUTION CODE: BBB11156

SPONSORING AGENCY CODE: BBB10350

DESCRIPTOR: BLUEPRINTS; BUILDING MATERIALS; CAPITAL OUTLAY (FOR FIXED ASSETS); COST EFFECTIVENESS; ELECTRICAL SYSTEMS; ELEMENTARY EDUCATION; *ENERGY CONSERVATION; EQUIPMENT MAINTENANCE; *EXPERIMENTS; FUEL CONSUMPTION; *HEATING; OPERATING EXPENSES; PERFORMANCE CRITERIA; *SOLAR RADIATION; TECHNOLOGICAL ADVANCEMENT; *THERMAL ENVIRONMENT

EDRS PRICE: EDRS PRICE MF-$0.76 HC-$6.97 PLUS POSTAGE

DESCRIPTIVE NOTE: 126P.; RELATED DOCUMENTS ARE EA 006 623-626; PHOTOGRAPHS WILL REPRODUCE POORLY

ISSUE: RIEMAY75

ABSTRACT: IN THE MIDDLE OF JANUARY 1974, AAI CORPORATION RECEIVED A CONTRACT TO CONDUCT A SOLAR HEATING PROOF-OF-CONCEPT EXPERIMENT (POCE) FOR A PUBLIC SCHOOL BUILDING. ON MARCH 1, 1974, THE EXPERIMENT BEGAN AS TIMONIUM ELEMENTARY SCHOOL, IN MARYLAND, BECAME THE FIRST SCHOOL IN THE UNITED STATES TO BE HEATED BY SOLAR ENERGY. IN THIS BRIEF PERIOD, THE CORPORATION DESIGNED, MANUFACTURED, AND INSTALLED A SOLAR ENERGY COLLECTOR ARRAY COMPLETE WITH MOUNTING TRUSSES, A 15,000 GALLON WATER STORAGE TANK, A HOT WATER HEATING SYSTEM, AND INSTRUMENTATION. FROM MARCH 1 TO MAY 15 THE WING OF THE SCHOOL CHOSEN FOR THE SOLAR EXPERIMENT RECEIVED 90 PERCENT OF ITS HEAT FROM THE SOLAR HEATING SYSTEM. EXPERIMENTAL DATA COLLECTED DURING THIS PERIOD IS PRESENTED IN THIS REPORT. THE REPORT DESCRIBES THE SYSTEM IN DETAIL, PRESENTS THE ANALYSIS OF OPERATION, AND DISCUSSES RECOMMENDATIONS AND CONCLUSIONS BASED ON THE RESULTS OF THE EXPERIMENT. THE EXPERIMENT IS CONSIDERED SUCCESSFUL SINCE IT HAS PROVEN THAT THE SOLAR HEATING OF SCHOOLS IS POSSIBLE, PRACTICAL, AND SOCIALLY ACCEPTABLE. IN ADDITION, OVER 1,200 GALLONS OF FUEL OIL WERE SAVED IN THE BRIEF PERIOD THE SYSTEM HAS BEEN IN OPERATION. (AUTHOR/MLF)

REPORT NUMBER: ER-7934; NSF-RA-N-74-098

AVAILABILITY: SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON, D.C. 20402 (STOCK NO. 3800-00191, $3.05)

INSTITUTION NAME: AAI CORP., BALTIMORE, MD.

SPONSORING AGENCY NAME: NATIONAL SCIENCE FOUNDATION, WASHINGTON, D.C. RANN PROGRAM.

ACCESSION NUMBER: ED100004

CLEARINGHOUSE ACCESSION NUMBER: EA006623

PUBLICATION DATE: MAY 74

TITLE: SOLAR HEATING AND COOLING OF BUILDINGS: PHASE 0. FEASIBILITY AND PLANNING STUDY. VOLUME 1: EXECUTIVE SUMMARY. DOCUMENT NO. 74SD419. FINAL REPORT.

INSTITUTION CODE: BBB11159

SPONSORING AGENCY CODE: BBB10350

DESCRIPTOR: CLIMATE CONTROL; COST EFFECTIVENESS; *ENERGY CONSERVATION; *EXPERIMENTS; FEASIBILITY STUDIES; FUEL CONSUMPTION; *HEATING; MARKETING; *PERFORMANCE CRITERIA; PREDICTION; *SOLAR RADIATION; TECHNICAL ILLUSTRATION; TECHNOLOGICAL ADVANCEMENT; LIFE CYCLE COSTING

EDRS PRICE: EDRS PRICE MF-$0.76 HC-$1.95 PLUS POSTAGE

DESCRIPTIVE NOTE: 29P.; RELATED DOCUMENTS ARE EA 006 622-626

ISSUE: RIEMAY75

ABSTRACT: THE PURPOSE OF THIS STUDY WAS TO ESTABLISH THE TECHNICAL AND ECONOMIC FEASIBILITY OF USING SOLAR ENERGY FOR THE HEATING AND COOLING OF BUILDINGS AND TO PROVIDE BASELINE INFORMATION FOR THE WIDESPREAD APPLICATION OF SOLAR ENERGY. THE INITIAL STEP IN THIS PROGRAM WAS A STUDY OF THE TECHNICAL, ECONOMIC, SOCIETAL, LEGAL, AND ENVIRONMENTAL FACTORS INVOLVED WITH SOLAR ENERGY AND THE IDENTIFICATION OF BARRIER PROBLEMS IN ITS USE AND OF POTENTIAL SOLUTIONS TO THESE PROBLEMS. THE STUDY ALSO INCLUDES DEFINITIONS AND PLANS FOR PROOF-OF-CONCEPT EXPERIMENTS. (AUTHOR/MLF)

REPORT NUMBER: DOC-74SD4219; NSF-RA-N-74-021A

INSTITUTION NAME: GENERAL ELECTRIC CO., PHILADELPHIA, PA. SPACE DIV.

SPONSORING AGENCY NAME: NATIONAL SCIENCE FOUNDATION, WASHINGTON, D.C. RANN PROGRAM.

ACCESSION NUMBER: ED100605

CLEARINGHOUSE ACCESSION NUMBER: EA006624

PUBLICATION DATE: 31 MAY 74

TITLE: SOLAR HEATING AND COOLING OF BUILDINGS (PHASE 0). VOLUME 1: EXECUTIVE SUMMARY.

INSTITUTION CODE: BBB04961

SPONSORING AGENCY CODE: BBB10350

DESCRIPTOR: AIR CONDITIONING; *CLIMATE CONTROL; COMPUTER PROGRAMS; *COST EFFECTIVENESS; *ENERGY CONSERVATION; EXPERIMENTS; *FEASIBILITY STUDIES; FUEL CONSUMPTION; HEATING; MARKETING; MATHEMATICAL MODELS; SIMULATION; *SOLAR RADIATION; TECHNICAL ILLUSTRATION; LIFE CYCLE COSTING

EDRS PRICE: EDRS PRICE MF-$0.76 HC-$3.[illegible]3 PLUS POSTAGE

DESCRIPTIVE NOTE: 89P.; RELATED DOCUMENTS ARE EA 006 622-626

ISSUE: RIEMAY75

ABSTRACT: THE PURPOSE OF THIS STUDY WAS TO ESTABLISH THE TECHNICAL AND ECONOMIC FEASIBILITY OF USING SOLAR ENERGY FOR THE HEATING AND COOLING OF BUILDINGS. FIVE SELECTED BUILDING TYPES IN 14 SELECTED CITIES WERE USED TO DETERMINE LOADS FOR SPACE HEATING, SPACE COOLING AND DEHUMIDIFICATION, AND DOMESTIC SERVICE HOT WATER HEATING. RELYING ON EXISTING AND PROVEN SOLAR AND CONVENTIONAL CLIMATIC CONTROL HARDWARE, THREE REFERENCES DESIGNS WERE SELECTED FOR DETAILED COST EVALUATION IN EACH OF THE 14 CITIES AND FIVE BUILDING TYPES. MATHEMATICAL MODELS WERE CONSTRUCTED OF THE REFERENCE SYSTEMS. A COMPUTER SIMULATION OF THE REFERENCE SYSTEMS WITH SPECIFIED INPUTS TO THE PROGRAM DETERMINED THE OVERALL SYSTEM PERFORMANCE. A SERIES OF COMPUTER PROGRAMS DETERMINED SYSTEM COST AND PERCENT SOLAR UTILIZATION FOR EACH OF THE REFERENCE SYSTEMS. THE MARKET PENETRATION ANALYSIS WAS INTEGRATED INTO THE COST PROGRAMS. THE SOCIAL IMPACT OF SOLAR ENERGY WAS ASSESSED BY A RANDOM TELEPHONE SURVEY IN THREE CITIES. ENVIRONMENTAL AND ECONOMIC IMPACT FORECASTS ARE CALCULATED. THREE PROOF-OF-CONCEPT EXPERIMENTS WERE RECOMMENDED. PHASE 1 AND 2 DEVELOPMENT PLANS WERE PREPARED, AND A UTILIZATION PLAN FOR IMPLEMENTATION AND COMMERCIALIZATION OF SOLAR ENERGY SYSTEMS WAS PREPARED. (AUTHOR/MLF)

REPORT NUMBER: NSF-RA-N-74-022A; TRW-25168-001

INSTITUTION NAME: TRW SYSTEMS GROUP, REDONDO BEACH, CALIF.

SPONSORING AGENCY NAME: NATIONAL SCIENCE FOUNDATION, WASHINGTON, D.C. RANN PROGRAM.

ACCESSION NUMBER: ED100606

CLEARINGHOUSE ACCESSION NUMBER: EA006625

PUBLICATION DATE: MAY 74

TITLE: SOLAR HEATING AND COOLING OF BUILDINGS: PHASE 0. EXECUTIVE SUMMARY. FINAL REPORT.

INSTITUTION CODE: BBB11160

SPONSORING AGENCY CODE: BBB10350

DESCRIPTOR: AIR CONDITIONING; *CLIMATE CONTROL; *COST EFFECTIVENESS; *ENERGY CONSERVATION; EXPERIMENTS; *FEASIBILITY STUDIES; FUEL CONSUMPTION; HEATING; MARKETING; *SOLAR RADIATION; SYSTEMS DEVELOPMENT; TECHNICAL ILLUSTRATION; LIFE CYCLE COSTING

EDRS PRICE: EDRS PRICE MF-$0.76 HC-$3.32 PLUS POSTAGE

DESCRIPTIVE NOTE: 70P.; RELATED DOCUMENTS ARE EA 006 622-626

ISSUE: RIEMAY75

ABSTRACT: AFTER THE WESTINGHOUSE ELECTRIC CORPORATION MADE A COMPREHENSIVE ANALYSIS OF THE TECHNICAL, ECONOMIC, SOCIAL, ENVIRONMENTAL, AND INSTITUTIONAL FACTORS AFFECTING THE FEASIBILITY OF UTILIZING SOLAR ENERGY FOR HEATING AND COOLING BUILDINGS, IT DETERMINED THAT SOLAR HEATING AND COOLING SYSTEMS CAN BECOME COMPETITIVE IN MOST REGIONS OF THE COUNTRY IN THE 1985-90 PERIOD. HEATING-ONLY SYSTEMS CAN BE COMPETITIVE IN THE 1975-80 PERIOD IN LIMITED REGIONS OF THE COUNTRY. IMPRESSIVE PROGRESS HAS RECENTLY BEEN MADE IN SOLAR COLLECTORS, BUT FURTHER REDUCTION IN COSTS IS NECESSARY TO CAPTURE A LARGE MARKET. FIVE REGIONS OF THE COUNTRY CONTAINING MORE THAN 75 PERCENT OF THE COUNTRY'S POPULATION HAVE BEEN IDENTIFIED AS THE MARKET FOR SOLAR SYSTEMS. RETROFIT OF SOLAR SYSTEMS TO EXISTING STRUCTURES IS NOT ECONOMICALLY ATTRACTIVE FOR RESIDENTIAL BUILDINGS BUT CAN BE APPLIED TO LARGER BUILDINGS. THE AMOUNT OF FOSSIL FUEL THAT CAN BE SAVED BY USE OF SOLAR ENERGY WILL BUILD UP SLOWLY AND COULD REACH 5G MILLION BARRELS OF OIL PER YEAR BY 1990. IN THE NEAT CENTURY, SALES OF SOLAR SYSTEMS COULD APPROACH $10 BILLION. A PROOF-OF-CONCEPT EXPERIMENT SPANNING A 3-YEAR PERIOD INVOLVING 300 SINGLE-FAMILY RESIDENCES AND 25 LARGE BUILDINGS, AND REQUIRING $26 MILLION IS RECOMMENDED. (AUTHOR)

REPORT NUMBER: NSF-RA-N-74-023A

INSTITUTION NAME: WESTINGHOUSE ELECTRIC CORP., BALTIMORE, MD.

SPONSORING AGENCY NAME: NATIONAL SCIENCE FOUNDATION, WASHINGTON, D.C. RANN PROGRAM.

ACCESSION NUMBER: ED100607

CLEARINGHOUSE ACCESSION NUMBER: EA006626

PUBLICATION DATE: 15 JUL 74

TITLE: SOLAR HEATING EXPERIMENT ON THE GROVER CLEVELAND SCHOOL, BOSTON, MASSACHUSETTS. FINAL REPORT.

INSTITUTION CODE: BBB11159

SPONSORING AGENCY CODE: BBB10350

DESCRIPTOR: BLUEPRINTS; BUILDING MATERIALS; CLIMATE CONTROL; COST EFFECTIVENESS; *ENERGY CONSERVATION; *EXPERIMENTS; FUEL CONSUMPTION; *HEATING; JUNIOR HIGH SCHOOLS; MIDDLE SCHOOLS; OPERATING EXPENSES; PERFORMANCE CRITERIA; *SOLAR RADIATION; TECHNOLOGICAL ADVANCEMENT; *THERMAL ENVIRONMENT

EDRS PRICE: EDRS PRICE MF-$0.76 HC-$10.78 PLUS POSTAGE

DESCRIPTIVE NOTE: 207P.; RELATED DOCUMENTS ARE EA 006 622-625; PHOTOGRAPHS WILL REPRODUCE POORLY

ISSUE: RIEMAY75

ABSTRACT: GENERAL ELECTRIC COMPANY WAS ONE OF FOUR CONTRACTORS WHO RECEIVED A CONTRACT IN EARLY JANUARY 1974 TO DESIGN, BUILD, AND INSTALL A SOLAR HEATING EXPERIMENT IN A PUBLIC SCHOOL. THE OVERALL OBJECTIVE OF THIS PROGRAM WAS TO OBTAIN DATA THAT WOULD ASSIST IN EVALUATING THE APPLICABILITY OF SOLAR HEATING SYSTEMS IN LARGE METROPOLITAN AREAS. THIS DATA WAS TO BE AN "OPERATIONAL" NATURE, IN CONTRAST TO THEORETICAL, AND TO ENCOMPASS THE AREAS OF CONSTRUCTION, SOCIETAL INTERACTIONS, ECONOMICS, AND AESTHETICS, AS WELL AS THE THERMAL PERFORMANCE ASPECTS. THE DATA WAS OBTAINED BY CONSTRUCTING AND OPERATING A SOLAR HEATING SYSTEM OF PILOT PLANT SCALE ON A MIDDLE SCHOOL IN BOSTON, MASSACHUSETTS. THE GROVER CLEVELAND SCHOOL WAS THE FIRST SOLAR HEATING EXPERIMENT TO COME ON LINE FOR CONTINUOUS OPERATION WHEN HEAT WAS SUPPLIED AT 4:10 P.M. ON MARCH 6, 1974. THE SYSTEM WAS OPERATED THROUGH MAY 13, 1974. THE EXPERIMENTAL DATA COLLECTED DURING THIS PERIOD IS PRESENTED IN THIS REPORT. THE REPORT DESCRIBES THE SYSTEM IN DETAIL, PRESENTS THE ANALYSIS OF OPERATION, AND DISCUSSES RECOMMENDATIONS AND CONCLUSIONS BASED ON THE RESULTS OF THE EXPERIMENT. (AUTHOR/MLF)

REPORT NUMBER: NSF-RA-N-74-064

INSTITUTION NAME: GENERAL ELECTRIC CO., PHILADELPHIA, PA. SPACE DIV.

SPONSORING AGENCY NAME: NATIONAL SCIENCE FOUNDATION, WASHINGTON, D.C. RANN PROGRAM.

ACCESSION NUMBER: ED100669

CLEARINGHOUSE ACCESSION NUMBER: EA006693

PUBLICATION DATE: 74

TITLE: THE ENERGY CRISIS IN THE PUBLIC SCHOOLS: ALTERNATIVE SOLUTIONS.

PERSONAL AUTHOR: GROSSBACH, WILMAR; SHAFFER, WILLIAM

INSTITUTION CODE: CIQ08779

DESCRIPTOR: *ADMINISTRATOR GUIDES; *DEPLETED RESOURCES; *ECOLOGICAL FACTORS; ELEMENTARY SECONDARY EDUCATION; *ENERGY CONSERVATION; FOOD SERVICE; *FUEL CONSUMPTION; PROBLEM SOLVING; SCHOOL BUSES; SCHOOL INDUSTRY RELATIONSHIP; SCHOOL MAINTENANCE; STUDENT TRANSPORTATION; UTILITIES

EDRS PRICE: EDRS PRICE MF-$0.76 HC-$4.43 PLUS POSTAGE

DESCRIPTIVE NOTE: 88P.

ISSUE: RIEMAY75

ABSTRACT: ONE HUNDRED AND EIGHTY SCHOOL PERSONNEL HELD A WORKSHOP WITH REPRESENTATIVES OF THE PETROLEUM, NATURAL GAS, AND ELECTRICAL POWER INDUSTRIES. THE OBJECTIVES OF THE WORKSHOP WERE (1) TO PROVIDE PARTICIPANTS WITH A COMMON BODY OF KNOWLEDGE AND A COMMON UNDERSTANDING OF THE ENERGY CRISIS AND ITS IMPLICATIONS FOR THE PUBLIC SCHOOLS, (2) TO DELINEATE PROCEDURES THAT SCHOOL DISTRICTS CAN USE TO CONSERVE ENERGY, AND (3) TO IDENTIFY PROBLEMS AND PROBLEM AREAS CREATED BY THE ENERGY SHORTAGE AND TO SEEK SOLUTIONS THROUGH COOPERATIVE PLANNING. AFTER A GENERAL SESSION, PARTICIPANTS WERE DIVIDED INTO SIXTEEN SMALL GROUPS. NINE OF THE GROUPS UTILIZED A BRAINSTORMING TECHNIQUE TO IDENTIFY SOLUTIONS TO PROBLEMS IN THE AREAS OF TRANSPORTATION OF PUPILS, ADMINISTRATION, REGULAR CLASSROOMS, SPECIALIZED CLASSROOMS, CLASSROOM USES OUTSIDE THE REGULAR SCHOOL DAY, EXTRA CURRICULAR ACTIVITIES, MAINTENANCE, AND FOOD SERVICES. THE REMAINING GROUPS INCORPORATED PROBLEMSOLVING TECHNIQUES INTO THEIR RESPONSES TO THE FOLLOWING HYPOTHETICAL SITUATIONS: DELAY IN DELIVERY OF INSTRUCTIONAL SUPPLIES, BLACKOUTS, DIESEL FUEL REDUCTION, GASOLINE REDUCTION, NATURAL GAS REDUCTION, ELECTRICAL POWER REDUCTION, AND INCREASE IN BUS RIDERS. A BIBLIOGRAPHY OF ADDITIONAL REFERENCE MATERIALS IS PROVIDED. (AUTHOR/MLF)

AVAILABILITY: VENTURA COUNTY SUPERINTENDENT OF SCHOOLS, COUNTY OFFICE BUILDING, VENTURA, CALIFORNIA 93001 ($2.00)

INSTITUTION NAME: VENTURA COUNTY SUPERINTENDENT OF SCHOOLS, CALIF.

ACCESSION NUMBER: ED100536

CLEARINGHOUSE ACCESSION NUMBER: PS007706

PUBLICATION DATE: 74

TITLE: HUMAN DEVELOPMENT, STAGES OF COGNITION, SCHOOL READINESS AND SOCIAL DEPRIVATION: A RATIONALE BASED ON PIAGET AND A NEW THEORY OF "BIUPLASMIC FORCES".

PERSONAL AUTHOR: OGLETREE, EARL J.

DESCRIPTOR: ABSTRACTION LEVELS; ACADEMIC ACHIEVEMENT; *CHILD DEVELOPMENT; *COGNITIVE PROCESSES; DEVELOPMENTAL PSYCHOLOGY; *ENERGY; *GROWTH PATTERNS; *HUMAN DEVELOPMENT; INTERDISCIPLINARY APPROACH; MATURATION; PSYCHOLOGICAL STUDIES; READINESS (MENTAL); RETARDATION; *BIUPLASMIC FORCES; PIAGET (JEAN)

EDRS PRICE: EDRS PRICE MF-$0.76 HC-$1.58 PLUS POSTAGE

DESCRIPTIVE NOTE: 16P.

ISSUE: RIEMAY75

ABSTRACT: A THEORY OF ENERGY FORCES DEVELOPED IN THE USSR SEEMS TO SUBSTANTIATE THE SUGGESTION THAT ACADEMIC LEARNING BEFORE A CHILD IS MATURATIONALLY READY WILL REDUCE HIS LEARNING POTENTIAL. THE BIOPLASMIC MODEL EXPLICATES PHYSICAL/MENTAL DEVELOPMENT, COGNITION, READINESS, AND DEPRIVATION. THE INVISIBLE BUT RECORDABLE BIOPLASMIC FORCES FACILITATE PHYSICAL GROWTH AND ARE THE BASIS OF COGNITION. THE FORCES ARE GRADUALLY RELEASED FROM PHYSICAL GROWTH FOR COGNITION AT AGES 7 (CONCRETE), AND 14 (FORMAL). READINESS--COGNITIVE CAPABILITIES--ARE DETERMINED BY THE QUANTITY OF AVAILABLE FORCES. PREMATURE LEARNING IS INEFFECTIVE AND ROBS THE BODY (BRAIN) OF ITS FULL POTENTIALITIES, CAUSING PREMATURE PLATEAUING OF COGNITIVE AND LEARNING CAPACITIES AND EMOTIONAL MALADJUSTMENTS LATER ON. EDUCATIONAL METHODS AND CURRICULUM SHOULD BE MADE MORE COMPATIBLE WITH AND SUPPORTIVE OF THE GROWTH FORCES OF THE CHILD. (AUTHOR/CS)

ACCESSION NUMBER: ED101937

CLEARINGHOUSE ACCESSION NUMBER: SE017399

PROGRAM AREA: 95

PUBLICATION DATE: JAN 74

TITLE: ENERGY AND YOU. ENVIRONMENTAL EDUCATION CURRICULUM.

INSTITUTION CODE: KUJ24608

SPONSORING AGENCY CODE: BBB00077

DESCRIPTOR: *CONSERVATION EDUCATION; CURRICULUM GUIDES; *EDUCABLE MENTALLY HANDICAPPED; *ENERGY; ENERGY CONSERVATION; *ENVIRONMENTAL EDUCATION; INSTRUCTIONAL MATERIALS; LEARNING ACTIVITIES; NATURAL RESOURCES; OUTDOOR EDUCATION; *SCIENCE EDUCATION; TEACHING GUIDES; UNITS OF STUDY (SUBJECT FIELDS); ELEMENTARY SECONDARY EDUCATION ACT TITLE III; ESEA TITLE III

EDRS PRICE: EDRS PRICE MF-$0.76 HC-$3.32 PLUS POSTAGE

DESCRIPTIVE NOTE: 70P.

ISSUE: RIEJUN75

ABSTRACT: THE CAUSES OF THE ENERGY CRISIS ARE MANY, AND THE SOLUTIONS ARE COMPLEX. SINCE EVERY PERSON IN THE WORLD IS AFFECTED, EVERY PERSON SHOULD HAVE AN UNDERSTANDING OF THE ENERGY SHORTAGE PROBLEM. THIS UNIT IS DESIGNED AROUND THE FOLLOWING TWO IDEAS: (1) TO DEVELOP AN UNDERSTANDING OF ENERGY AND THE NEED FOR IT, AND (2) TO UNDERSTAND SOME OF THE CAUSES, EFFECTS, AND SOLUTIONS OF THE ENERGY CRISIS. IT ATTEMPTS TO PRESENT INFORMATION REGARDING ENERGY PROBLEMS FOR LEVEL II AND III EDUCABLE MENTALLY RETARDED STUDENTS. INCLUDED ARE FOUR TOPICS: (1) WHAT IS ENERGY, (2) ENERGY FUELS, (3) HOW WE USE ENERGY, AND (4) CONSERVATION OF ENERGY. FOR EACH TOPIC THERE ARE BEHAVIORAL OBJECTIVES, STUDENT ACTIVITIES, AND TEACHER SUGGESTIONS. THE NUMBERS IN PARENTHESES BY THE ACTIVITY NUMBER INDICATE THE OBJECTIVES THE ACTIVITY HELPS DEVELOP. THE UNIT ALSO INCLUDES GOALS AND OBJECTIVES, AN OBJECTIVE SUMMARY SHEET, A UNIT TIME LINE, A MATERIALS SHEET, AND 20 APPENDIXES WHICH CONTAIN VARIOUS TEACHING AIDS RELATED TO THE ACTIVITIES AND WHICH ARE ALSO SUITABLE FOR DUPLICATION. (TR)

INSTITUTION NAME: TOPEKA PUBLIC SCHOOLS, KANS.

SPONSORING AGENCY NAME: BUREAU OF ELEMENTARY AND SECONDARY EDUCATION (DHEW/OE), WASHINGTON, D.C.

ACCESSION NUMBER: ED101959

CLEARINGHOUSE ACCESSION NUMBER: SE018625

PUBLICATION DATE: 74

TITLE: LIVING WITHIN OUR MEANS: ENERGY AND SCARCITY. ENVIRONMENTAL EDUCATION INSTRUCTIONAL ACTIVITIES 7-12.

PERSONAL AUTHOR: JAMASON, BARRY W.

INSTITUTION CODE: BB810333

DESCRIPTOR: CONSERVATION EDUCATION; *ENERGY; *ENVIRONMENTAL EDUCATION; FUEL CONSUMPTION; INSTRUCTIONAL MATERIALS; INTERDISCIPLINARY APPROACH; LANGUAGE ARTS; *LEARNING ACTIVITIES; NATURAL RESOURCES; OBJECTIVES; SCIENCE EDUCATION; SCIENCES; *SECONDARY GRADES; SOCIAL STUDIES; *TEACHING GUIDES

EDRS PRICE: EDRS PRICE MF-$0.76 HC-$5.70 PLUS POSTAGE

DESCRIPTIVE NOTE: 112P.; FOR THE K-6 BOOKLET, SEE ED 093 673

ISSUE: RIEJUN75

ABSTRACT: THIS MANUAL IS A SOURCE OF LEARNING ACTIVITIES AND INSTRUCTIONAL MATERIALS FOR TEACHING ENVIRONMENTAL EDUCATION CONCEPTS IN GRADES 7-12. CONTENTS ARE ORGANIZED INTO THE AREAS OF CONSUMER EDUCATION, ENGLISH LANGUAGE ARTS, HOME ECONOMICS, MATHEMATICS, SCIENCE AND SOCIAL STUDIES, AND ARE SUBDIVIDED BY SUGGESTED GRADE LEVEL OR SUBJECT AREA WHERE APPLICABLE. SUPPLEMENTARY ACTIVITIES ARE INCLUDED. AN APPENDIX CONTAINING REFERENCE BOOKS AND ARTICLES, PERIODICALS, FILMS AND MULTIMEDIA MATERIALS CONCLUDES THIS MANUAL. (BT)

INSTITUTION NAME: NEW YORK STATE EDUCATION DEPT., ALBANY. OFFICE OF INSTRUCTIONAL SERVICES.

ACCESSION NUMBER: ED102058

CLEARINGHOUSE ACCESSION NUMBER: SO008096

PUBLICATION DATE: 74

TITLE: SYLLABUS FOR AN "ISSUES APPROACH" TO TEACHING ECONOMIC PRINCIPLES.

PERSONAL AUTHOR: LEFTWICH, RICHARD H.; SHARP, ANSEL M.

INSTITUTION CODE: QPX39695

DESCRIPTOR: AGRICULTURE; *COLLEGE INSTRUCTION; CURRENT EVENTS; ECONOMIC DISADVANTAGEMENT; *ECONOMIC EDUCATION; ECONOMICS; ENERGY; HEALTH; HIGHER EDUCATION; INDUCTIVE METHODS; *INSTRUCTIONAL INNOVATION; POLLUTION; POPULATION GROWTH; RELEVANCE (EDUCATION); *SOCIAL PROBLEMS; STUDENT INTERESTS; UNEMPLOYMENT; WORLD PROBLEMS; INTRODUCTORY COURSES; ISSUES

EDRS PRICE: EDRS PRICE MF-$0.76 HC NOT AVAILABLE FROM EDRS. PLUS POSTAGE

DESCRIPTIVE NOTE: 35P.

ISSUE: RIEJUN75

ABSTRACT: THIS SYLLABUS FOR AN "ISSUES" APPROACH TO AN INTRODUCTORY ECONOMIC PRINCIPLES COURSE EVOLVED OUT OF THREE YEARS OF EXPERIMENTATION AT OKLAHOMA STATE UNIVERSITY. THE SYLLABUS COVERS 11 IMPORTANT SOCIAL ISSUES: POPULATION GROWTH, AGRICULTURE, HIGHER EDUCATION, CRIME, POLLUTION, HEALTH, POVERTY, DISCRIMINATION, UNEMPLOYMENT, INFLATION, AND THE ENERGY CRISIS. EACH ISSUE IS TREATED AS FOLLOWS: (1) POINTS FOR DISCUSSION ARE PRESENTED; (2) THESE DISCUSSION POINTS ARE FOLLOWED BY A LISTING OF THE ECONOMIC CONCEPTS AND PRINCIPLES EXPLAINED AND APPLIED IN THE DISCUSSION OF THE ISSUE; (3) THE ESSENTIAL ASPECTS OF THE ISSUE, THE ECONOMIC ANALYSIS OF THE ISSUE, AND WHAT CAN BE DONE ABOUT THE ISSUE ARE RECAPITULATED; AND (4) ASSIGNMENTS ARE MADE FROM SEVERAL BOOKS WHICH ARE DESIGNED PRIMARILY FOR AN ISSUES-ORIENTED PRINCIPLES COURSE. FIVE SCHEDULES IN THE APPENDIX SUGGEST WAYS TO INTEGRATE AN "ISSUES" APPROACH INTO INTRODUCTORY ONE-SEMESTER COURSES TAUGHT WITH A PRINCIPLES TEXT AND A SUPPLEMENTARY ISSUES TEXT. AN EVALUATION OF THE COURSE INDICATES THAT AN ISSUES APPROACH DOES NOT ADVERSELY AFFECT ECONOMIC LEARNING AND THAT STUDENTS FAVOR THE COURSE. THIS SYLLABUS IS THE FIRST OF SEVERAL THAT ARE BEING PUBLISHED BY THE JOINT COUNCIL ON ECONOMIC EDUCATION TO PROVIDE ALTERNATIVE APPROACHES TO "THE" INTRODUCTORY COURSE. (JM)

AVAILABILITY: JOINT COUNCIL ON ECONOMIC EDUCATION, 1212 AVENUE OF THE AMERICAS, NEW YORK, NEW YORK 10036 ($1.00)

JOURNAL CITATION: THE JOURNAL OF ECONOMIC EDUCATION; SPECIAL ISSUE 1 WINTER 1974

INSTITUTION NAME: JOINT COUNCIL ON ECONOMIC EDUCATION, NEW YORK, N.Y.

ACCESSION NUMBER: ED102715

CLEARINGHOUSE ACCESSION NUMBER: EA006836

PUBLICATION DATE: JUL 73

TITLE: TECHNICAL OPTIONS FOR ENERGY CONSERVATION IN BUILDINGS. NATIONAL CONFERENCE OF STATES ON BUILDING CODES AND STANDARDS AND NATIONAL BUREAU OF STANDARDS JOINT EMERGENCY WORKSHOP ON ENERGY CONSERVATION IN BUILDINGS. (WASHINGTON, D.C., JUNE 19, 1973) NBS TECHNICAL NOTE 789.

INSTITUTION CODE: BB801696

DESCRIPTOR: AIR CONDITIONING; *BUILDING DESIGN; *ENERGY CONSERVATION; FUEL CONSUMPTION; HEATING; LIGHTING; *MECHANICAL EQUIPMENT; PERFORMANCE CRITERIA; *REFERENCE MATERIALS; SOLAR RADIATION; *THERMAL ENVIRONMENT; WINDOWS; LIFE CYCLE COSTS

EDRS PRICE: EDRS PRICE MF-$0.76 HC-$9.51 PLUS POSTAGE

DESCRIPTIVE NOTE: 190P.

ISSUE: RIEJUL75

ABSTRACT: THE PURPOSE OF THIS REPORT IS TO PROVIDE REFERENCE MATERIAL ON THE TECHNICAL OPTIONS FOR ENERGY CONSERVATION IN BUILDINGS. ACTIONS PERTINENT TO EXISTING BUILDINGS AND NEW BUILDINGS ARE CONSIDERED SEPARATELY. REGARDING EXISTING BUILDINGS, PRINCIPAL TOPICS INCLUDE SUMMER COOLING, WINTER HEATING, AND OTHER ENERGY-RELATED FEATURES SUCH AS INSULATION, FENESTRATION, LIGHTING, APPLIANCES, HOT WATER, AND HUMAN COMFORT. SUGGESTED ACTIONS INCLUDE THOSE WHICH CAN BE ACCOMPLISHED VOLUNTARILY OR WITHOUT EXPENSE AND THOSE WHICH REQUIRE SOME MODEST EFFORT OR EXPENSE ON THE PART OF THE BUILDING OWNER OR OCCUPANT. REGARDING NEW BUILDINGS, ENERGY CONSERVATION ACTIONS THAT DEAL WITH BUILDING DESIGN AND MECHANICAL SYSTEMS ARE DESCRIBED. THE REPORT CONCLUDES WITH A SUMMARY OF MECHANISMS FOR IMPLEMENTATION OF CONSERVATION METHODS AND CRITERIA FOR USE IN EVALUATION OF THEM. THROUGHOUT THE REPORT, EMPHASIS IS PLACED ON TECHNICAL OPTIONS. THE ECONOMIC IMPLICATIONS OF SUCH OPTIONS HAVE NOT BEEN DETAILED. (AUTHOR/MLF)

REPORT NUMBER: NBS-TN-789

AVAILABILITY: SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON, D.C. 20402 (ORDER NO. C13.46:789, $2.35, $2.00 GPO BOOKSTORE)

INSTITUTION NAME: NATIONAL BUREAU OF STANDARDS (DOC), WASHINGTON, D.C. INST. FOR APPLIED TECHNOLOGY.

ACCESSION NUMBER: ED103213

CLEARINGHOUSE ACCESSION NUMBER: SE017355

PUBLICATION DATE: 73

TITLE: FUN WITH THE ENVIRONMENT.

INSTITUTION CODE: BB806039

DESCRIPTOR: CONSERVATION EDUCATION; *ELEMENTARY GRADES; ENERGY CONSERVATION; *ENVIRONMENTAL EDUCATION; INDEPENDENT STUDY; *LEARNING ACTIVITIES; NATURAL RESOURCES; POLLUTION; SCIENCE EDUCATION

EDRS PRICE: EDRS PRICE MF-$0.76 HC-$1.58 PLUS POSTAGE

DESCRIPTIVE NOTE: 26P.

ISSUE: RIEJUL75

ABSTRACT: THIS SELF-CONTAINED ACTIVITY BOOKLET IS DESIGNED TO TEACH YOUNG ELEMENTARY STUDENTS ABOUT THEIR ENVIRONMENT. INFORMATION ABOUT THE ENVIRONMENT AND PEOPLE'S INTERACTION WITH IT ARE PRESENTED IN CARTOON AND COLORING BOOK FORM. DRAWINGS AND SIMPLE VOCABULARY EXPLAIN HOW THE ENVIRONMENT IS POLLUTED AND NATURAL RESOURCES WASTED, AS WELL AS WAYS THAT THESE SITUATIONS CAN BE CORRECTED. ACTIVITIES INCLUDE AN ENVIRONMENTAL CROSSWORD PUZZLE; COLORING AND WRITE-IN PAGES, AND AN ENVIRONMENTAL CHECKLIST. (MA)

AVAILABILITY: SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON, D.C. 20402 (STOCK NO. 5500-00087, $0.75; DOMESTIC POSTPAID $0.65, GPO BOOKSTORE)

INSTITUTION NAME: ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, D. C.

ACCESSION NUMBER: ED103214

CLEARINGHOUSE ACCESSION NUMBER: SE017480

PUBLICATION DATE: 73

TITLE: RESOURCES FOR THE FUTURE. ANNUAL REPORT 1973.

INSTITUTION CODE: BBBOO408

DESCRIPTOR: AIR POLLUTION CONTROL; *ANNUAL REPORTS; CONSERVATION EDUCATION; ECOLOGY; EDUCATIONAL PROGRAMS; ENERGY; *ENVIRONMENT; ENVIRONMENTAL EDUCATION; ENVIRONMENTAL RESEARCH; *NATURAL RESOURCES; RESEARCH; *SOCIAL SCIENCES; *RESOURCES FOR THE FUTURE; RFF

EDRS PRICE: EDRS PRICE MF-$0.76 HC-$6.97 PLUS POSTAGE

DESCRIPTIVE NOTE: 148P.

ISSUE: RIEJUL75

ABSTRACT: PRESENTED IS THE ANNUAL REPORT FOR RESOURCES FOR THE FUTURE, INC. (RFF) FOR THE YEAR ENDING SEPTEMBER 30, 1973. THIS ORGANIZATION IS DEDICATED TO ADVANCING THE DEVELOPMENT, CONSERVATION, AND USE OF NATURAL RESOURCES AND THE IMPROVEMENT OF THE QUALITY OF THE ENVIRONMENT THROUGH PROGRAMS OF RESEARCH AND EDUCATION. MOST OF THEIR STUDIES ARE IN THE FIELD OF THE SOCIAL SCIENCES. DOCUMENT CONTENT INCLUDES AN ESSAY BY THE GROUP'S PRESIDENT, JOSEPH L. FISHER, ENTITLED "KEEPING THINGS IN PERSPECTIVE," AND TWO SPECIAL ARTICLES, "AIR POLLUTION AND HUMAN HEALTH" AND "LOW-COST, ABUNDANT ENERGY: PARADISE LOST?" BOTH BY RFF MEMBERS. EDUCATIONAL AND RESEARCH PROGRAMS CONDUCTED IN THE FOLLOWING AREAS ARE DESCRIBED: QUALITY OF THE ENVIRONMENT, NATURAL ENVIRONMENTS, LAND AND WATER RESOURCES, ENERGY AND MINERALS, REGIONAL AND URBAN STUDIES; APPRAISALS AND SPECIAL PROJECTS; AND LATIN AMERICAN PROGRAMS. A LIST OF RFF PUBLICATIONS, STAFF ACTIVITIES AND WRITINGS, AND A FINANCIAL STATEMENT ARE ALSO REPORTED. (BT)

INSTITUTION NAME: RESOURCES FOR THE FUTURE, INC., WASHINGTON, D.C.

ACCESSION NUMBER: ED103216

CLEARINGHOUSE ACCESSION NUMBER: SE017484

PUBLICATION DATE: FEB 74

TITLE: EDUCATION'S RESPONSE TO THE ENERGY CRISIS. A SURVEY OF THE STATES. RESEARCH BRIEF VOL. 2, NO. 1.

PERSONAL AUTHOR: ROSS, DORIS M.

INSTITUTION CODE: BBB06428

DESCRIPTOR: ECONOMICS; *EDUCATIONAL PROBLEMS; *EDUCATIONAL PROGRAMS; *ENERGY; ENVIRONMENT; *ENVIRONMENTAL RESEARCH; FUEL CONSUMPTION; STATE LEGISLATION; *SURVEYS; TRANSPORTATION

EDRS PRICE: EDRS PRICE MF-$0.76 HC-$1.95 PLUS POSTAGE

DESCRIPTIVE NOTE: 31P.

ISSUE: RIEJUL75

ABSTRACT: THIS REPORT LISTS THE RESULTS OF A 50 STATE SURVEY ON EDUCATION'S RESPONSE TO THE ENERGY CRISIS CONDUCTED IN DECEMBER 1973. THE SURVEY ASKED RESPONDENTS IN STATE DEPARTMENTS OF EDUCATION AND STATE HIGHER EDUCATION EXECUTIVE OFFICES TO REPORT FACTS ABOUT THEIR STATE'S RESPONSE TO THE ENERGY CRISIS, AS WELL AS THEIR OWN OPINIONS AND PROJECTIONS. SEVENTY-TWO RESPONDENTS IN 48 STATES SENT BACK COMPLETED QUESTIONNAIRES FROM WHICH INFORMATION WAS EXTRACTED FOR THIS REPORT. AMONG THE TOPICS DISCUSSED ARE ACTION THAT HAS BEEN TAKEN, TRANSPORTATION AND HEATING, CONTINGENCY PLANS FORMULATED BY STATES, STATE LEGISLATIVE CHANGES, GASOLINE SHORTAGES, RISING COSTS, EDUCATION AND THE ECONOMY, ECOLOGY, UNIQUE SCHEDULING ALTERNATIVES, AND LESSON PLANS. A COPY OF THE SURVEY INSTRUMENT IS INCLUDED IN THE APPENDIX. (BT)

AVAILABILITY: EDUCATION COMMISSION OF THE STATES, 300 LINCOLN TOWER, 1860 LINCOLN STREET, DENVER, COLORADO 80203 ($2.00)

INSTITUTION NAME: EDUCATION COMMISSION OF THE STATES, DENVER, COLO. DEPT. OF RESEARCH AND INFORMATION SERVICES.

ACCESSION NUMBER: ED104658

CLEARINGHOUSE ACCESSION NUMBER: SE018660

PUBLICATION DATE: 74

TITLE: BUYER'S GUIDE TO ENVIRONMENTAL MEDIA: A DIRECTORY OF BOOKS, MAGAZINES, FILMS AND INFORMATION SOURCES. ENERGY.

PERSONAL AUTHOR: GERBER, MICHAEL, ED.

DESCRIPTOR: ANNOTATED BIBLIOGRAPHIES; *AUDIOVISUAL AIDS; CONSERVATION EDUCATION; *ENERGY; ENVIRONMENT; ENVIRONMENTAL EDUCATION; FILMS; *INSTRUCTIONAL MATERIALS; MASS MEDIA; NATURAL RESOURCES; POLLUTION; *RESOURCE MATERIALS; SCIENCE EDUCATION; WASTES

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 57P.; SPRING 1974, NUMBER 2

ISSUE: RIEAUG75

ABSTRACT: THIS DIRECTORY IS DESIGNED TO HELP LOCATE ENERGY AND ENVIRONMENTAL RESOURCE MATERIALS, PRINT AND NONPRINT. THE DIRECTORY LISTS PRIVATE AND GOVERNMENT INFORMATION SOURCES AND PROVIDES AN ANNOTATED GUIDE TO PERIODICAL LITERATURE. CITATIONS OF SELECTED BOOK TITLES PUBLISHED IN 1973 INCLUDE THE TOPICS OF AIR POLLUTION, CHEMICAL AND BIOLOGICAL CONTAMINATION, ENERGY, ENVIRONMENTAL EDUCATION, URBAN ECOLOGY, FOOD AND DRUGS, LAND USE, NOISE POLLUTION, NON-RENEWABLE RESOURCES, OCEANS, POPULATION PLANNING AND CONTROL, RENEWABLE RESOURCES, SOLID WASTE, AND WILDLIFE. A LISTING OF ENVIRONMENTAL FILMS AND FILM DISTRIBUTORS CONCLUDES THIS DIRECTORY. (BT)

AVAILABILITY: ENVIRONMENT INFORMATION CENTER, INC., MEDIA SERVICES DEPT., 124 EAST 39TH ST., NEW YORK, NEW YORK 10016 ($2.60, PREPAID)

ACCESSION NUMBER: ED104670

CLEARINGHOUSE ACCESSION NUMBER: SE018804

PUBLICATION DATE: 74

TITLE: ENERGY CHOICES FOR NOW: SAVING, USING, RENEWING. AN INTRODUCTION TO ENERGY IN THE ENVIRONMENT. STUDENT BOOK AND TEACHERS' MANUAL.

PERSONAL AUTHOR: PAUL, PEG; AND OTHERS

INSTITUTION CODE: BBB10955; FGK56700

DESCRIPTOR: CONSERVATION EDUCATION; DEPLETED RESOURCES; *ENERGY; ENVIRONMENT; *ENVIRONMENTAL EDUCATION; FUEL CONSUMPTION; INSTRUCTIONAL MATERIALS; INTERDISCIPLINARY APPROACH; *INTERMEDIATE GRADES; LEARNING ACTIVITIES; *NATURAL RESOURCES; SCIENCES; SOCIAL STUDIES

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 76P.; COLOR TONES USED PREVENT ADEQUATE REPRODUCTION

ISSUE: RIEAUG75

ABSTRACT: THIS BOOK IS DESIGNED AS AN INTRODUCTION TO THE TOPIC OF ENERGY IN THE ENVIRONMENT. IT IS DIRECTED TOWARD THE INTERMEDIATE STUDENT AS A FUTURE CITIZEN WHO WILL BE INVOLVED IN MAKING IMPORTANT DECISIONS CONCERNING THIS VITAL ISSUE. THE MATERIALS CAN BE USED IN ANY CLASSROOM WHERE THE TOPIC OF THE ENVIRONMENT IS BEING STUDIED--SOCIAL STUDIES, LANGUAGE ARTS, OR SCIENCE. THE STUDENT TEXT IS DIVIDED INTO FIVE SECTIONS. THESE INCLUDE: WHAT'S IT GOT TO DO WITH ME?; AND IT ALL BEGINS WITH THE SUN!; ENERGY SOURCES WE USE!; MEETING THE CHALLENGE WITH NUCLEAR ENERGY!; SOLVING THE ENERGY PUZZLE!; AND FUTURE CHOICES AND YOU. A TEACHER'S GUIDE, INCLUDED WITH THE STUDENT TEXT, CONTAINS STUDENT OBJECTIVES, BACKGROUND INFORMATION, MATERIALS NEEDED, SUGGESTIONS FOR THE PRESENTATION AND LEARNING ACTIVITIES. (BT)

AVAILABILITY: NATIONAL EDUCATION ASSOCIATION, ACADEMIC BUILDING, WEST HAVEN, CONNECTICUT 06516 (STOCK NUMBERS 381-12100 AND 381-12102, $3.50 FOR THE SET)

INSTITUTION NAME: EDUCATIONAL CHALLENGES, INC., WASHINGTON, D.C.; NATIONAL EDUCATION ASSOCIATION, WASHINGTON, D.C.

ACCESSION NUMBER: ED105552

CLEARINGHOUSE ACCESSION NUMBER: EA006932

PUBLICATION DATE: FEB 74

TITLE: SOLAR COOLING FOR BUILDINGS. WORKSHOP PROCEEDINGS (LOS ANGELES, CALIFORNIA, FEBRUARY 6-8, 1974).

PERSONAL AUTHOR: DE WINTER, FRANCIS, ED.

INSTITUTION CODE: BBB07411

SPONSORING AGENCY CODE: BBB10350

DESCRIPTOR: *AIR CONDITIONING; BUILDING INNOVATION; *CLIMATE CONTROL; ENERGY CONSERVATION; ENGINEERING; FEDERAL PROGRAMS; HEATING; MECHANICAL EQUIPMENT; *RESEARCH NEEDS; *SOLAR RADIATION; *TECHNOLOGICAL ADVANCEMENT; WORKSHOPS

EDRS PRICE: EDRS PRICE MF-$0.76 HC-$12.05 PLUS POSTAGE

DESCRIPTIVE NOTE: 239P.; HELD IN CONJUNCTION WITH AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR-CONDITIONING ENGINEERS (ASHRAE) SEMI-ANNUAL MEETING

ISSUE: RIESEP75

ABSTRACT: A CONSENSUS HAS DEVELOPED AMONG U.S. SOLAR RESEARCHERS THAT THE SOLAR-POWERED COOLING OF BUILDINGS IS AN IMPORTANT TOPIC. MOST SOLAR HEATING SYSTEMS ARE TECHNICALLY SIMPLER, AND MORE HIGHLY DEVELOPED, THAN SOLAR COOLING DEVICES ARE. THE DETERMINATION OF THE BEST DESIGN CONCEPT FOR ANY PARTICULAR APPLICATION IS NOT A SIMPLE PROCESS. SIGNIFICANT PROBLEMS REMAIN IN THE UNDERSTANDING OF MECHANISMS, IN THE DESIGN AND OPERATION OF COST-EFFECTIVE HARDWARE, AND IN THE UNDERSTANDING OF THE ECONOMIC PERFORMANCE THAT IS POSSIBLE. BECAUSE OF THESE REMAINING RESEARCH AND DEVELOPMENT PROBLEMS, MANY DIFFERENT CONCEPTS WERE EXPLORED AT THE WORKSHOP. IN ADDITION TO THE PURELY TECHNICAL PROBLEMS, THERE ARE PROBLEMS OF RECONCILING NOVEL EQUIPMENT WITH CURRENT BUILDINGS AND WITH BUILDING PRACTICES, WITH OTHER PRESENT-DAY HARDWARE, WITH

ENGINEERING, ARCHITECTURAL, AND BUILDING TRADE PRACTICES, WITH CODES AND OTHER LEGAL REQUIREMENTS, WITH FINANCIAL PRACTICES AND TAXATION SYSTEMS, WITH CONSUMER ESTHETIC AND PRACTICAL NEEDS, AND WITH A MYRIAD OF OTHER SUCH "NON-ENGINEERING" INTERFACES. A SPECIFIC SESSION ON "IMPLEMENTATION" WAS DEVOTED TO DISCUSSION OF OBSTACLES FACING SOLAR COOLING, WITH THE PARTICIPATION OF SPECIALISTS IN MANY OF THE NONENGINEERING AREAS. (AUTHOR/MLF)

REPORT NUMBER: NSF-RA-N-74-063

AVAILABILITY: SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON, D.C. 20402 (STOCK NO. 3800-00189, $3.00)

INSTITUTION NAME: JET PROPULSION LAB., PASADENA, CALIF.

SPONSORING AGENCY NAME: NATIONAL SCIENCE FOUNDATION, WASHINGTON, D.C. RANN PROGRAM.

ACCESSION NUMBER: ED105845

CLEARINGHOUSE ACCESSION NUMBER: IR001876

PUBLICATION DATE: 74

TITLE: ENERGY: A GUIDE TO ORGANIZATIONS AND INFORMATION RESOURCES IN THE UNITED STATES.

INSTITUTION CODE: BBB11667

DESCRIPTOR: *AGENCIES; CATALOGS; CONSUMER EDUCATION; *ENERGY; *ENERGY CONSERVATION; ENVIRONMENTAL RESEARCH; FEDERAL PROGRAMS; *INFORMATION SOURCES; LOCAL GOVERNMENT; NATIONAL ORGANIZATIONS; NATURAL RESOURCES; *POLICY FORMATION; RESOURCE GUIDES; RESOURCES; STATE AGENCIES; UTILITIES; CENTER FOR CALIFORNIA PUBLIC AFFAIRS; UNITED STATES

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 204P.

ISSUE: RIESEP75

ABSTRACT: A CENTRAL SOURCE OF INFORMATION ON THE KEY ORGANIZATIONS CONCERNED WITH ENERGY IN THE UNITED STATES HAS BEEN COMPILED. CHAPTER 2 COVERS ORGANIZATIONS INVOLVED WITH BROAD QUESTIONS OF ENERGY POLICY; CHAPTERS 2-6 DESCRIBE ORGANIZATIONS HAVING TO DO WITH SOURCES OF ENERGY: OIL, NATURAL GAS, COAL, WATER POWER, NUCLEAR FISSION, AND ALTERNATE SOURCES; CHAPTER 7 DEALS WITH THE ELECTRIC UTILITY INDUSTRY; CHAPTERS 8-14 COVER THE INTERRELATED ISSUES OF ENERGY CONSERVATION, ENVIRONMENTAL QUALITY, AND CONSUMER PROTECTION. EMPHASIS IS PLACED ON ORGANIZATIONS THAT INFLUENCE, FORMULATE OR ADMINISTER POLICIES AFFECTING ENERGY PRODUCTION, DISTRIBUTION, AND USE, OR THAT PROVIDE INFORMATION OF INTEREST TO THE NONSPECIALIST. INFORMATIVE DATA FOR EACH AGENCY OR ORGANIZATION INCLUDES: (1) LOCATION; (2) NAMES OF ADMINISTRATIVE OFFICERS; (3) DATE OF CREATION; AND (4) PUBLICATIONS AVAILABLE. (AUTHOR/RKC)

AVAILABILITY: CENTER FOR CALIFORNIA PUBLIC AFFAIRS, 226 WEST FOOTHILL BOULEVARD, CLAREMONT, CALIFORNIA 91711 ($10.50)

INSTITUTION NAME: CENTER FOR CALIFORNIA PUBLIC AFFAIRS, CLAREMONT.

ACCESSION NUMBER: ED106013

CLEARINGHOUSE ACCESSION NUMBER: RC008482

PUBLICATION DATE: 17 APR 75

TITLE: ENERGY AND RURAL PEOPLE AND AGRICULTURE.

INSTITUTION CODE: BBB11501; BBB11502

DESCRIPTOR: *AGRICULTURAL PRODUCTION; *CONSUMER ECONOMICS; EFFICIENCY; *ENERGY CONSERVATION; FEDERAL PROGRAMS; *FOOD; FUTURES (OF SOCIETY); LIFE STYLE; LIVING STANDARDS; NATIONAL NORMS; RURAL AREAS; *RURAL ECONOMICS

EDRS PRICE: EDRS PRICE MF-$0.76 HC-$1.58 PLUS POSTAGE

DESCRIPTIVE NOTE: 12P.; PAPER PRESENTED AT THE FIRST NATIONAL CONFERENCE ON RURAL AMERICA, WASHINGTON, D.C., APRIL 14-17, 1975

ISSUE: RIESEP75

ABSTRACT: INCREASING ENERGY DEPENDENCY, HIGH ENERGY PRICES, AND DEPLETING ENERGY SOURCES HAVE NECESSITATED REVIEW OF THE NATURE OF U.S. ENERGY--WHO OWNS IT; HOW WE MANAGE IT; HOW AND WHY WE CONSUME IT; AND WHAT SHOULD BE DONE ABOUT THESE PATTERNS. GIVEN THE POWER WIELDED BY THE OIL COMPANIES, THE PRESSURE OF THE NATIONAL STANDARD OF LIVING, AND THE LACK OF CONCENTRATED POPULATIONS, RURAL AREAS ARE RENDERED ESPECIALLY VULNERABLE. BUT IT IS THE NATURE OF AGRICULTURAL PRODUCTION PATTERNS COUPLED WITH CONSUMPTION PATTERNS WHICH BEST ILLUSTRATE AMERICAN ENERGY VULNERABILITY. WHEN ASSESSED IN CALORIC TERMS, AGRICULTURAL PRODUCTION AND AGRICULTURAL CONSUMPTION ARE EXTREMELY EXPENSIVE. THE AVERAGE AMERICAN CONSUMES APPROXIMATELY 3,300 CALORIES AND NEARLY 140 GRAMS OF PROTEIN A DAY WHICH REQUIRES AN ADDITIONAL 10,017 CALORIES FOR PRODUCTION, MAKING THE U.S. DAILY CALORIC OUTLAY 9,000 MORE THAN THAT OF AN EAST INDIAN WHO EXPENDS ONLY 783 ADDITIONAL CALORIES TO PRODUCE 1,990 CALORIES PER DAY. COMPREHENSIVE REFORM SHOULD INCLUDE A SINGLE NATIONAL OFFICE OF ENERGY RESEARCH AND PLANNING; PUBLIC OWNERSHIP OF OIL COMPANIES; FUNDING AT BOTH STATE AND FEDERAL LEVELS FOR ALTERNATIVE ENERGY SOURCES; CONSUMER PARTICIPATION IN NONPROFIT ENERGY COOPERATIVES; FEDERAL PROGRAMS; NATIONWIDE CONSERVATION AND DEVELOPMENT OF A LEARNER LIFESTYLE; AND AGRICULTURAL REFORMS TO PROMOTE ENERGY EFFICIENCY. (JC)

REPORT NUMBER: CWP-8

INSTITUTION NAME: RURAL AMERICA, INC., WASHINGTON, D.C.; RURAL HOUSING ALLIANCE, WASHINGTON, D.C.

ACCESSION NUMBER: ED106025

CLEARINGHOUSE ACCESSION NUMBER: RC008494

PUBLICATION DATE: MAR 75

TITLE: RURAL LAND USE: PATTERNS AND PROPOSALS FOR REFORM.

PERSONAL AUTHOR: ERICKSON, RONALD P.

INSTITUTION CODE: BBB11501

DESCRIPTOR: *AGRICULTURAL PRODUCTION; CAPITAL; *CONSERVATION (ENVIRONMENT); ENERGY CONSERVATION; EVALUATION; FOOD; FUTURES (OF SOCIETY); GLOBAL APPROACH; *LAND USE; LEGISLATION; *PLANNING; POLICY FORMATION; *RURAL AREAS; TECHNOLOGY

EDRS PRICE: EDRS PRICE MF-$0.76 HC-$1.58 PLUS POSTAGE

DESCRIPTIVE NOTE: 17P.; PAPER PRESENTED AT THE NATIONAL CONFERENCE ON RURAL AMERICA (1ST, WASHINGTON, D.C., APRIL 1975)

ISSUE: RIESEP75

ABSTRACT: IN A WORLD WHERE THE POPULATION IS INCREASING AT AN ANNUAL RATE OF 76 MILLION, WHERE FOOD IS IN SHORT SUPPLY, AND WHERE AGRICULTURAL PRODUCTION IS ONE OF OUR LARGEST CAPITAL GENERATING SOURCES, U.S. AGRICULTURE AND THE LAND BASE SUPPORTING IT ARE VITAL. RURAL AMERICA HAS BEEN LOSING LAND AT A RATE OF ONE AND A HALF MILLION ACRES A YEAR DUE TO SOIL EROSION; SUBDIVISION, PARK, AND RECREATIONAL DEVELOPMENTS; NEW AND REFORESTATION PROJECTS; AND THE UNCONTROLLED AND UNPLANNED QUALITY OF THE U.S. GROWTH ETHIC. PREMIUMS ON HIGH ENERGY REQUIREMENTS, "GREEN REVOLUTION" TECHNOLOGIES, SPIN-OFFS OF URBAN LIMITATIONS, AND AGGREGATIONS OF RURAL LAND AND CAPITAL HAVE ALSO CONTRIBUTED TO THE LOSS OF FARMABLE LANDS. IMPORTANT RUDIMENTARY STEPS WHICH MUST BE TAKEN INCLUDE: (1) A NATIONAL LAND INVENTORY (ASSESSMENT OF: LAND POTENTIAL; PRESENT AND FUTURE ENERGY REQUIREMENTS; RECLAMATION; SOIL CLASSIFICATION; CROP YIELD VALUE; AND CROP IMPACT ON THE LABOR FORCE, ENERGY, AND ENVIRONMENT); (2) A FREEZE ON THE USE OF FARM LAND FOR NONFARM PURPOSES; AND (3) EFFORTS TO INFLUENCE THE WAY LAND IS OWNED AND USED (CORPORATE LEGISLATION; EXTENSION OF THE SHERMAN-CLAYTON ACT TO COVER AGRICULTURE; MODIFICATIONS OF THE CURRENT TAX STRUCTURE TO PREVENT "TAX-LOSS" AGRICULTURE RELATIVE TO ENVIRONMENTAL CONSERVATION). (JC)

INSTITUTION NAME: RURAL HOUSING ALLIANCE, WASHINGTON, D.C.

ACCESSION NUMBER: ED106070

CLEARINGHOUSE ACCESSION NUMBER: SE018143

PUBLICATION DATE: MAR 74

TITLE: ENERGY AND MAN'S ENVIRONMENT: ELEMENTARY THROUGH SECONDARY INTERDISCIPLINARY ACTIVITY GUIDE.

PERSONAL AUTHOR: RIS, THOMAS F., ED.

INSTITUTION CODE: BBB11643; ZBU93150

DESCRIPTOR: ELEMENTARY SECONDARY EDUCATION; *ENERGY; *ENVIRONMENTAL EDUCATION; INTERDISCIPLINARY APPROACH; *LEARNING ACTIVITIES; *NATURAL RESOURCES; SCIENCE EDUCATION

EDRS PRICE: EDRS PRICE MF-$0.76 HC-$6.97 PLUS POSTAGE

DESCRIPTIVE NOTE: 130P.; SECOND REVISED DISCUSSION DRAFT

ISSUE: RIESEP75

ABSTRACT: ENERGY AND ITS RELATIONSHIP TO THE ENVIRONMENT IS THE TOPIC OF THIS ACTIVITY GUIDE. THE STUDENT ACTIVITIES VARY IN SOPHISTICATION AND CAN BE USED AT THE DIFFERENT GRADE LEVELS, K-12. THESE ACTIVITIES ARE DESIGNED FOR CORRELATION IN THE EXISTING SCHOOL CURRICULUM AND HAVE AS THEIR OBJECTIVES THE TEACHING OF SKILLS THROUGH MANIPULATION OF MATERIALS AND INDEPENDENT STUDY, THE SHAPING OF POSITIVE ENVIRONMENTAL ATTITUDES, AND THE DEVELOPING OF AN ENVIRONMENTAL AWARENESS. EACH CHAPTER IN THE GUIDE CONCERNS A NEW ENERGY-ENVIRONMENT CONCEPT AND IS DIVIDED INTO A NUMBER OF OBJECTIVES BASED ON FOUR THEMES--SCIENTIFIC, ETHICAL, AESTHETIC, AND UTILITARIAN. EACH OF THESE IS FURTHER STATED AS THEY APPLY TO THE VARIOUS GRADE LEVELS. AND FINALLY, A LISTING OF THE ACTIVITIES IS GIVEN. (MA)

INSTITUTION NAME: WASHINGTON OFFICE OF THE STATE SUPERINTENDENT OF PUBLIC INSTRUCTION, OLYMPIA.; WASHINGTON STATE OFFICE OF ENVIRONMENTAL PROGRAMS, SEATTLE.

ACCESSION NUMBER: ED106120

CLEARINGHOUSE ACCESSION NUMBER: SE019070

PUBLICATION DATE: 74

TITLE: UNIVERSITY OF CALIFORNIA SEA GRANT COLLEGE PROGRAM DIRECTORY 1974-1975.

INSTITUTION CODE: BBB06522

SPONSORING AGENCY CODE: BBB08824

DESCRIPTOR: DIRECTORIES; *EDUCATIONAL PROGRAMS; ENERGY; HIGHER EDUCATION; NATURAL RESOURCES; *OCEANOLOGY; *PROGRAM DESCRIPTIONS; *RESEARCH; *UNIVERSITIES; SEA GRANT; UNIVERSITY OF CALIFORNIA

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 20P.; CALIFORNIA UNIVERSITY INSTITUTE OF MARINE RESOURCES SEA GRANT PUB. NO. 36, IMR REFERENCE NO. 74-11, 1974

ISSUE: RIESEP75

ABSTRACT: THE DIRECTORY PROVIDES DETAILED INFORMATION ON THE UNIVERSITY OF CALIFORNIA SEA GRANT PROGRAMS DEALING WITH MANAGEMENT, EDUCATION, AND ADVISORY SERVICES; COASTAL RESOURCES; AGRICULTURAL RESEARCH AND DEVELOPMENT; FISHERIES

RESEARCH AND DEVELOPMENT; AS WELL AS ENERGY RESOURCES AND DEVELOPMENT. (NTIS)

REPORT NUMBER: COM-74-11778; NOAA-74102210

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, SPRINGFIELD, VIRGINIA 22151 (COM-74-11778, PC-$6.00, MF-$2.25)

INSTITUTION NAME: CALIFORNIA UNIV., SAN DIEGO, LA JOLLA. INST. OF MARINE RESOURCES.

SPONSORING AGENCY NAME: NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (DOC), ROCKVILLE, MD. NATIONAL SEA GRANT PROGRAM.

ACCESSION NUMBER: ED106213

CLEARINGHOUSE ACCESSION NUMBER: SO008361

PUBLICATION DATE: MAY 75

TITLE: WAYS TO ENVIRONMENTAL EDUCATION, VOLUME III.

PERSONAL AUTHOR: ALLEN, RODNEY F., ED.; AND OTHERS

INSTITUTION CODE: 88807681; 88811220

DESCRIPTOR: ANIMAL FACILITIES; COMMUNITY INVOLVEMENT; *COMMUNITY RESOURCES; CREATIVITY; *ECOLOGY; ELEMENTARY SECONDARY EDUCATION; ENERGY; *ENVIRONMENTAL EDUCATION; LEARNING ACTIVITIES; *MUSEUMS; *OUTDOOR EDUCATION; READING IMPROVEMENT; SHORT COURSES; SOCIAL SCIENCES

EDRS PRICE: EDRS PRICE MF-$0.76 HC-$6.97 PLUS POSTAGE

DESCRIPTIVE NOTE: 150P.; FOR RELATED DOCUMENTS, SEE ED 100 734 AND SO 008 187; PAGES 8 OF DEVELOPING READING COMPETENCY SECTION AND 15 THROUGH 18 OF ENERGY AND ENVIRONMENT SECTION OF THE ORIGINAL DOCUMENT ARE COPYRIGHTED AND THEREFORE NOT AVAILABLE

ISSUE: RIESEP75

ABSTRACT: TEN ENVIRONMENTAL EDUCATION BOOKLETS PRESENTED IN THIS DOCUMENT ARE THE THIRD VOLUME OF THE ENVIRONMENTAL SERIES DEVELOPED BY COMMUNITY GROUPS AROUND THE TALLAHASSEE JUNIOR MUSEUM AND ITS PIONEER FARM. THE FIRST THREE BOOKLETS PRESENT AN OVERVIEW OF THE MUSEUM AND OF THE VARIOUS EDUCATION PROGRAMS AND ACTIVITIES OFFERED FOR STUDENTS AT THE MUSEUM AND FARM. ANIMALS ARE DISCUSSED IN DETAIL IN THE NEXT UNIT, DEVELOPED BY THE FLORIDA AUDUBON CHAPTER. ANOTHER UNIT FOSTERS CREATIVITY IN ENVIRONMENTAL EDUCATION WHILE ALSO DEVELOPING HUMAN BEHAVIOR. OTHER UNITS PRESENT HELPFUL HINTS FOR GROWING PLANTS AND HERBS, AND INCLUDE INFORMATION ON ENVIRONMENTAL EXCURSIONS; DEVELOPING READING COMPETENCY IN ENVIRONMENTAL EDUCATION; ENVIRONMENTAL AND BEHAVIORAL FEELINGS; AND ENERGY AND ENVIRONMENT LEARNING ACTIVITIES FOR CAMP AND HOME. THESE MATERIALS AUGMENT THOSE FOUND IN VOLUMES I AND II (ED 100 734 AND SO 008 187). (JH)

INSTITUTION NAME: FLORIDA STATE UNIV., TALLAHASSEE. COLL. OF EDUCATION.; TALLAHASSEE JUNIOR MUSEUM, FLA.

ACCESSION NUMBER: ED107495

CLEARINGHOUSE ACCESSION NUMBER: SE019058

PUBLICATION DATE: 74

TITLE: A CURRICULUM GUIDE FOR NINTH GRADE IN ENVIRONMENTAL SCIENCE. FIRST ROUGH DRAFT.

PERSONAL AUTHOR: MCKENNA, HAROLD J.

INSTITUTION CODE: QPX14625

SPONSORING AGENCY CODE: PGX57295

DESCRIPTOR: CASE STUDIES; *CURRICULUM GUIDES; ENERGY; *ENVIRONMENTAL EDUCATION; *GRADE 9; INSTRUCTIONAL MATERIALS; INTERDISCIPLINARY APPROACH; *JUNIOR HIGH SCHOOLS; LEARNING ACTIVITIES; PESTICIDES; POLLUTION; POPULATION EDUCATION; SCIENCE EDUCATION; *TEACHER DEVELOPED MATERIALS; TEACHING GUIDES

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 85P.; MARGINAL LEGIBILITY. A RELATED DOCUMENT IS SE 019 059

ISSUE: RIEOCT75

ABSTRACT: THIS CURRICULUM GUIDE IS A ROUGH DRAFT FOR A SUGGESTED COURSE OF STUDY IN ENVIRONMENTAL SCIENCE. THIS DRAFT WAS DEVELOPED BY SCIENCE TEACHERS FROM THE GREATER NEW YORK AREA AND WAS DESIGNED FOR THE NINTH GRADE, BUT COULD BE USED FOR ANY GRADE LEVEL WITH MODIFICATIONS. THIS COURSE OF STUDY SUGGESTS AN INTERDISCIPLINARY APPROACH TO STUDYING THE ENVIRONMENT AND HAS SUBHEADINGS FOR TEACHERS TO USE IN DEVELOPING THEIR DAILY LESSON PLANS. THERE ARE FOUR BASIC UNITS IN THE OUTLINE: POPULATION, ENERGY, PESTICIDES, AND POLLUTION. THESE UNITS ARE FURTHER SUBDIVIDED INTO: TOPIC, UNDERSTANDINGS AND CONCEPTS, ACTIVITIES, AND SUPPLEMENTARY INFORMATION. AS MODIFICATION OF THIS GUIDE CONTINUES, IT IS HOPED THAT SPECIFIC LABORATORY AND FIELD MODULES MIGHT BE INCORPORATED ALONG WITH A LIST OF VISUAL AIDS AVAILABLE IN THE VARIOUS TOPICS. (AUTHOR/BT)

AVAILABILITY: DR. HAROLD J. MCKENNA, DIRECTOR, ENVIRONMENTAL STUDIES PROGRAM, THE CITY COLLEGE OF NEW YORK, KLAPPER HALL, ROOM 104, NEW YORK, NEW YORK 10031 ($5.00); ERIC/SMEAC, THE OHIO STATE UNIVERSITY, 400 LINCOLN TOWER, COLUMBUS, OHIO 43210 (ON LOAN)

INSTITUTION NAME: CITY UNIV. OF NEW YORK, N.Y. CITY COLL.

SPONSORING AGENCY NAME: NATIONAL SCIENCE FOUNDATION, WASHINGTON, D.C.

ACCESSION NUMBER: ED107517

CLEARINGHOUSE ACCESSION NUMBER: SE019206

PUBLICATION DATE: 64

TITLE: ATOMIC FUEL, UNDERSTANDING THE ATOM SERIES. REVISED.

PERSONAL AUTHOR: HOGERTON, JOHN F.

INSTITUTION CODE: X1E04840

DESCRIPTOR: ECONOMICS; *ENERGY; *FUELS; NATURAL RESOURCES; *NUCLEAR PHYSICS; POLLUTION; PRODUCTION TECHNIQUES; RADIATION; RADIOISOTOPES; SCIENTIFIC RESEARCH; UTILITIES; WASTE DISPOSAL; WASTES; AEC; ATOMIC ENERGY COMMISSION; *NUCLEAR ENERGY; POWER PLANTS

EDRS PRICE: EDRS PRICE MF-$0.76 HC-$1.95 PLUS POSTAGE

DESCRIPTIVE NOTE: 46P.

ISSUE: RIEOCT75

ABSTRACT: THIS PUBLICATION IS PART OF THE *UNDERSTANDING THE ATOM* SERIES. COMPLETE SETS OF THE SERIES ARE AVAILABLE FREE TO TEACHERS, SCHOOLS, AND PUBLIC LIBRARIANS WHO CAN MAKE THEM AVAILABLE FOR REFERENCE OR USE BY GROUPS. AMONG THE TOPICS DISCUSSED ARE: WHAT ATOMIC FUEL IS; THE ODYSSEY OF URANIUM; PRODUCTION OF URANIUM; FABRICATION OF REACTOR FUEL ELEMENTS; PROCESSING OF SPENT FUEL; THE COST OF ATOMIC FUEL; ATOMIC FUEL AS AN ENERGY RESOURCE; AND ATOMIC FUEL UTILIZATION. A LISTING OF BOOKS, REPORTS, ARTICLES AND MOTION PICTURES RELATED TO ATOMIC FUELS IS INCLUDED. (BT)

AVAILABILITY: USAEC TECHNICAL INFORMATION CENTER, P. O. BOX 62, OAK RIDGE, TN 37830

INSTITUTION NAME: ATOMIC ENERGY COMMISSION, OAK RIDGE, TENN. DIV. OF TECHNICAL INFORMATION.

ACCESSION NUMBER: ED107518

CLEARINGHOUSE ACCESSION NUMBER: SE019207

PUBLICATION DATE: 64

TITLE: ATOMIC POWER SAFETY.

PERSONAL AUTHOR: HOGERTON, JOHN F.

INSTITUTION CODE: 88807192

DESCRIPTOR: *ENERGY; ENVIRONMENT; *NUCLEAR PHYSICS; PHYSICS; RADIATION; RADIOISOTOPES; *SAFETY; SCIENTIFIC RESEARCH; *UTILITIES; AEC; ATOMIC ENERGY COMMISSION; *NUCLEAR ENERGY; POWER PLANTS

EDRS PRICE: EDRS PRICE MF-$0.76 HC-$1.95 PLUS POSTAGE

DESCRIPTIVE NOTE: 48P.

ISSUE: RIEOCT75

ABSTRACT: THIS PUBLICATION IS ONE OF A SERIES OF INFORMATION BOOKLETS FOR THE GENERAL PUBLIC PUBLISHED BY THE UNITED STATES ATOMIC ENERGY COMMISSION. AMONG THE TOPICS DISCUSSED ARE: WHAT IS ATOMIC POWER?; WHAT DOES SAFETY DEPEND ON?; CONTROL OF RADIOACTIVE MATERIAL DURING OPERATION; ACCIDENT PREVENTION; CONTAINMENT IN THE EVENT OF AN ACCIDENT; LICENSING AND REGULATION OF ATOMIC POWER PLANTS; THE EXPERIENCE RECORD; SAFETY RESEARCH; AND ADDITIONAL INFORMATION ON ATOMIC POWER. SCHOOLS AND PUBLIC LIBRARIES MAY OBTAIN A COMPLETE SET OF THE BOOKLETS WITHOUT CHARGE. (BT)

AVAILABILITY: USAEC TECHNICAL INFORMATION CENTER, P. O. BOX 62, OAK RIDGE, TN 37830 (CUST TO THE GENERAL PUBLIC FOR 1-4 COPIES, $0.25 EA., 5-99, $0.20 EA., 100 OR MORE, $0.15 EA.)

INSTITUTION NAME: ATOMIC ENERGY COMMISSION, WASHINGTON, D. C. OFFICE OF INFORMATION SERVICES.

ACCESSION NUMBER: ED107519

CLEARINGHOUSE ACCESSION NUMBER: SE019208

PUBLICATION DATE: 74

TITLE: A BIBLIOGRAPHY OF BASIC BOOKS ON ATOMIC ENERGY. UPDATE.

INSTITUTION CODE: 88807192

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; *BIBLIOGRAPHIES; *BOOKLISTS; ELEMENTARY SCHOOL SCIENCE; *GOVERNMENT PUBLICATIONS; *NUCLEAR PHYSICS; PHYSICS; RESOURCE MATERIALS; SCIENCE EDUCATION; SECONDARY SCHOOL SCIENCE; AEC; *ATOMIC ENERGY COMMISSION; NUCLEAR ENERGY

EDRS PRICE: EDRS PRICE MF-$0.76 HC-$4.43 PLUS POSTAGE

DESCRIPTIVE NOTE: 79P.; SEE ED 059 896 FOR AN EARLIER EDITION

ISSUE: RIEOCT75

ABSTRACT: THIS BOOKLET, PART OF THE UNITED STATES ATOMIC ENERGY COMMISSION'S SERIES OF INFORMATION BOOKLETS, LISTS SELECTED COMMERCIALLY PUBLISHED BOOKS FOR THE GENERAL PUBLIC ON ATOMIC ENERGY AND CLOSELY RELATED SUBJECTS. IT INCLUDES ANNOTATED BIBLIOGRAPHIES FOR CHILDREN (GRADE LEVEL INDICATED) AND ADULTS. THE BOOKS ARE ARRANGED BY SUBJECT, ALPHABETIZED BY TITLE AND ALSO INDEXED BY AUTHOR. A LIST OF PUBLISHER ADDRESSES IS INCLUDED ALONG WITH A BRIEF INTRODUCTION TO LIBRARY USAGE. THE BOOKLET IS ILLUSTRATED WITH PHOTOGRAPHS OF NUCLEAR PHYSICISTS, RESEARCH INSTALLATIONS, AND SOME APPLICATIONS OF NUCLEAR ENERGY. (BT)

AVAILABILITY: USAEC TECHNICAL INFORMATION CENTER, P. O. BOX 62, OAK RIDGE, TN 37830

INSTITUTION NAME: ATOMIC ENERGY COMMISSION, WASHINGTON, D. C. OFFICE OF INFORMATION SERVICES.

ACCESSION NUMBER: ED107520

CLEARINGHOUSE ACCESSION NUMBER: SE019209

PUBLICATION DATE: 74

TITLE: CONTROLLED NUCLEAR FUSION.

PERSONAL AUTHOR: GLASSTONE, SAMUEL

INSTITUTION CODE: BBB07192

DESCRIPTOR: *ENERGY; *NUCLEAR PHYSICS; PHYSICS; RADIOISOTOPES; *SCIENTIFIC RESEARCH; AEC; ATOMIC ENERGY COMMISSION; NUCLEAR REACTORS

EDRS PRICE: EDRS PRICE MF-$0.76 HC-$4.43 PLUS POSTAGE

DESCRIPTIVE NOTE: 95P.

ISSUE: RIEOCT75

ABSTRACT: THIS PUBLICATION IS ONE OF A SERIES OF INFORMATION BOOKLETS FOR THE GENERAL PUBLIC PUBLISHED BY THE UNITED STATES ATOMIC ENERGY COMMISSION. AMONG THE TOPICS DISCUSSED ARE: IMPORTANCE OF FUSION ENERGY; CONDITIONS FOR NUCLEAR FUSION; THERMONUCLEAR REACTIONS IN PLASMAS; PLASMA CONFINEMENT BY MAGNETIC FIELDS; EXPERIMENTS WITH PLASMAS; HIGH-TEMPERATURE PLASMA STUDIES; NUCLEAR FUSION REACTORS WITH MAGNETIC CONFINEMENT; INERTIAL CONFINEMENT; AND NUCLEAR FUSION RESEARCH PROGRAMS. A READING LIST AND FREE-LOAN FILM LIST ARE INCLUDED. SCHOOLS AND PUBLIC LIBRARIES MAY OBTAIN THE BOOKLETS WITHOUT CHARGE. (BT)

AVAILABILITY: USAEC TECHNICAL INFORMATION CENTER, P. O. BOX 62, OAK RIDGE, TN 37830

INSTITUTION NAME: ATOMIC ENERGY COMMISSION, WASHINGTON, D. C. OFFICE OF INFORMATION SERVICES.

ACCESSION NUMBER: ED107521

CLEARINGHOUSE ACCESSION NUMBER: SE019210

PUBLICATION DATE: 64

TITLE: DIRECT CONVERSION OF ENERGY.

PERSONAL AUTHOR: CORLISS, WILLIAM R.

INSTITUTION CODE: BBB07192

DESCRIPTOR: ELECTRICITY; ELECTRONICS; *ENERGY; NUCLEAR PHYSICS; PHYSICS; *SCIENTIFIC RESEARCH; *THERMODYNAMICS; AEC; ATOMIC ENERGY COMMISSION

EDRS PRICE: EDRS PRICE MF-$0.76 HC-$1.95 PLUS POSTAGE

DESCRIPTIVE NOTE: 41P.

ISSUE: RIEOCT75

ABSTRACT: THIS PUBLICATION IS ONE OF A SERIES OF INFORMATION BOOKLETS FOR THE GENERAL PUBLIC PUBLISHED BY THE UNITED STATES ATOMIC ENERGY COMMISSION. DIRECT ENERGY CONVERSION INVOLVES ENERGY TRANSFORMATION WITHOUT MOVING PARTS. THE CONCEPTS OF DIRECT AND DYNAMIC ENERGY CONVERSION PLUS THE LAWS GOVERNING ENERGY CONVERSION ARE INVESTIGATED. AMONG THE TOPICS DISCUSSED ARE: THERMOELECTRICITY; THERMIONIC CONVERSION; MAGNETOHYDRODYNAMIC CONVERSION; CHEMICAL BATTERIES; THE FUEL CELL; SOLAR CELLS; NUCLEAR BATTERIES; FERROELECTRIC CONVERSION AND THERMOMAGNETIC CONVERSION. FIVE PROBLEMS RELATED TO THE READING MATERIAL ARE INCLUDED. A LIST OF SUGGESTED REFERENCES CONCLUDES THIS REPORT. A COMPLETE SET OF THESE BOOKLETS MAY BE OBTAINED BY SCHOOL AND PUBLIC LIBRARIES WITHOUT CHARGE. (BT)

AVAILABILITY: USAEC TECHNICAL INFORMATION CENTER, P.O. BOX 62, OAK RIDGE, TN 37830 (COST TO THE GENERAL PUBLIC FOR 1-4 COPIES, $0.25 EA., 5-99, $0.20 EA., 100 OR MORE, $0.15 EA.)

INSTITUTION NAME: ATOMIC ENERGY COMMISSION, WASHINGTON, D. C. OFFICE OF INFORMATION SERVICES.

ACCESSION NUMBER: ED107522

CLEARINGHOUSE ACCESSION NUMBER: SE019211

PUBLICATION DATE: 73

TITLE: NUCLEAR POWER PLANTS. REVISED.

PERSONAL AUTHOR: LYERLY, RAY L.; MITCHELL, WALTER, III

INSTITUTION CODE: BBB07192

DESCRIPTOR: ECONOMICS; ELECTRICITY; *ENERGY; *NUCLEAR PHYSICS; PHYSICS; RADIATION; SCIENTIFIC RESEARCH; UTILITIES; AEC; ATOMIC ENERGY COMMISSION; NUCLEAR REACTORS; *POWER PLANTS

EDRS PRICE: EDRS PRICE MF-$0.76 HC-$3.32 PLUS POSTAGE

DESCRIPTIVE NOTE: 62P.

ISSUE: RIEOCT75

ABSTRACT: THIS PUBLICATION IS ONE OF A SERIES OF INFORMATION BOOKLETS FOR THE GENERAL PUBLIC PUBLISHED BY THE UNITED STATES ATOMIC ENERGY COMMISSION. AMONG THE TOPICS DISCUSSED ARE: WHY USE NUCLEAR POWER?; FROM ATOMS TO ELECTRICITY; REACTOR TYPES; TYPICAL PLANT DESIGN FEATURES; THE COST OF NUCLEAR POWER; PLANTS IN THE UNITED STATES; DEVELOPMENTS IN FOREIGN COUNTRIES; AND THE LAST WORD. A LIST OF SUGGESTED REFERENCES, INCLUDING BOOKS, REPORTS, ARTICLES, AND MOTION PICTURES, IS INCLUDED. SCHOOL AND PUBLIC LIBRARIES MAY OBTAIN A COMPLETE SET OF BOOKLETS WITHOUT CHARGE. (BT)

AVAILABILITY: USAEC TECHNICAL INFORMATION CENTER, P.O. BOX 62, OAK RIDGE, TN 37830

INSTITUTION NAME: ATOMIC ENERGY COMMISSION, WASHINGTON, D. C. OFFICE OF INFORMATION SERVICES.

ACCESSION NUMBER: ED107523

CLEARINGHOUSE ACCESSION NUMBER: SE019212

PUBLICATION DATE: 70

TITLE: NUCLEAR REACTORS. REVISED.

PERSONAL AUTHOR: HOGERTON, JOHN F.

INSTITUTION CODE: XIE04840

DESCRIPTOR: ELECTRICITY; *ENERGY; *NUCLEAR PHYSICS; OCEANOLOGY; PHYSICS; SAFETY; *SCIENTIFIC RESEARCH; UTILITIES; AEC; ATOMIC ENERGY COMMISSION; NUCLEAR REACTORS

EDRS PRICE: EDRS PRICE MF-$0.76 HC-$3.32 PLUS POSTAGE

DESCRIPTIVE NOTE: 61P.

ISSUE: RIEOCT75

ABSTRACT: THIS PUBLICATION IS ONE OF A SERIES OF INFORMATION BOOKLETS FOR THE GENERAL PUBLIC PUBLISHED BY THE UNITED STATES ATOMIC ENERGY COMMISSION. AMONG THE TOPICS DISCUSSED ARE: HOW REACTORS WORK; REACTOR DESIGN; RESEARCH, TEACHING, AND MATERIALS TESTING; REACTORS (RESEARCH, TEACHING AND MATERIALS); PRODUCTION REACTORS; REACTORS FOR ELECTRIC POWER GENERATION; REACTORS TO SUPPLY HEAT; REACTORS AT SEA; REACTORS IN SPACE; REACTOR SAFETY; AND REACTORS OF TOMORROW. THE APPENDIX CONTAINS A LIST OF UNITED STATES CENTRAL STATION NUCLEAR POWER PROJECTS THAT ARE OPERABLE, BEING BUILT, OR PLANNED AS OF JUNE 1970. A LIST OF SUGGESTED REFERENCES, INCLUDING BOOKS, REPORTS, ARTICLES, AND MOTION PICTURES, IS INCLUDED. SCHOOL AND PUBLIC LIBRARIES MAY OBTAIN A COMPLETE SET OF THE BOOKLETS WITHOUT CHARGE. (BT)

AVAILABILITY: USAEC TECHNICAL INFORMATION CENTER, P. O. BOX 62, OAK RIDGE, TN 37830

INSTITUTION NAME: ATOMIC ENERGY COMMISSION, OAK RIDGE, TENN. DIV. OF TECHNICAL INFORMATION.

ACCESSION NUMBER: ED107524

CLEARINGHOUSE ACCESSION NUMBER: SE019213

PUBLICATION DATE: 69

TITLE: RADIOACTIVE WASTES. REVISED.

PERSONAL AUTHOR: FOX, CHARLES H.

INSTITUTION CODE: BBB07192

DESCRIPTOR: *ENVIRONMENT; NATURAL RESOURCES; *NUCLEAR PHYSICS; PHYSICS; POLLUTION; RADIATION; *RADIOISOTOPES; SCIENTIFIC RESEARCH; *WASTE DISPOSAL; *WASTES; AEC; ATOMIC ENERGY COMMISSION; RADIOACTIVITY

EDRS PRICE: EDRS PRICE MF-$0.76 HC-$3.32 PLUS POSTAGE

DESCRIPTIVE NOTE: 52P.

ISSUE: RIEOCT75

ABSTRACT: THIS PUBLICATION IS ONE OF A SERIES OF INFORMATION BOOKLETS FOR THE GENERAL PUBLIC PUBLISHED BY THE UNITED STATES ATOMIC ENERGY COMMISSION. THIS BOOKLET DEALS WITH THE HANDLING, PROCESSING AND DISPOSAL OF RADIOACTIVE WASTES. AMONG THE TOPICS DISCUSSED ARE: THE NATURE OF RADIOACTIVE WASTES; WASTE MANAGEMENT; AND RESEARCH AND DEVELOPMENT. THERE ARE FOUR APPENDICES WHICH LIST: NATURALLY OCCURRING RADIOISOTOPES ENCOUNTERED IN MINING, MILLING, AND FUEL PREPARATION IN THE URANIUM FUEL CYCLE; PRINCIPLE FISSION-PRODUCT RADIOISOTOPES IN RADIOACTIVE WASTES; PRINCIPLE ACTIVATION-PRODUCT RADIOISOTOPES PRODUCED BY NEUTRON IRRADIATION OF NONFUEL MATERIALS; AND A LIST OF FIRMS LICENSED TO RECEIVE AND DISPOSE OF RADIOACTIVE WASTES. A LIST OF SUGGESTED REFERENCES AT THE POPULAR AND TECHNICAL LEVEL, INCLUDING BOOKS, REPORTS, ARTICLES, AND MOTION PICTURES, IS INCLUDED. SCHOOLS AND PUBLIC LIBRARIES MAY OBTAIN A COMPLETE SET OF THE BOOKLETS WITHOUT CHARGE. (BT)

AVAILABILITY: USAEC TECHNICAL INFORMATION CENTER, P.O. BOX 62, OAK RIDGE, TN 37830 (COST TO THE GENERAL PUBLIC FOR 1-4 COPIES, $0.25 EA., 5-99, $0.20 EA., 100 OR MORE, $0.15 EA.)

INSTITUTION NAME: ATOMIC ENERGY COMMISSION, WASHINGTON, D. C. OFFICE OF INFORMATION SERVICES.

ACCESSION NUMBER: ED107809

CLEARINGHOUSE ACCESSION NUMBER: CE003908

PROGRAM AREA: 95

PUBLICATION DATE: APR 74

TITLE: INTEREST-BASED CURRICULUM FOR HOUSE CARE SERVICES: SCIENCE.

INSTITUTION CODE: LJN26078

SPONSORING AGENCY CODE: RMO66000

DESCRIPTOR: *CAREER EDUCATION; *CHEMISTRY INSTRUCTION; CONSUMER SCIENCE; *CURRICULUM GUIDES; ELECTRICITY; ENERGY; INTEGRATED CURRICULUM; LABORATORY PROCEDURES; LEARNING ACTIVITIES; METRIC SYSTEM; MODERN SCIENCE; *PHYSICAL SCIENCES; RELEVANCE (EDUCATION); SCIENCE CURRICULUM; *SCIENCE EDUCATION; SCIENCE EXPERIMENTS; SCIENCE UNITS; SECONDARY EDUCATION; TEACHER DEVELOPED MATERIALS; VOCATIONAL EDUCATION

EDRS PRICE: EDRS PRICE MF-$0.76 HC-$5.70 PLUS POSTAGE

DESCRIPTIVE NOTE: 107P.; FOR RELATED DOCUMENTS, SEE CE 003 907 AND CE 003 909-10

ISSUE: RIENOV75

ABSTRACT: THE INTEREST-BASED CURRICULUM MATERIALS ARE DESIGNED TO CORRELATE THE SUBJECTS OF ENGLISH, MATH,

SCIENCE, AND HOME ECONOMICS AND INFUSE ACADEMIC SKILLS INTO THE WORLD OF WORK. THE HOUSE CARE SCIENCE CURRICULUM GUIDE IS DIVIDED INTO FIVE UNITS: (1) MEASUREMENT, (2) HOUSEHOLD CHEMISTRY, (3) HOUSEHOLD ELECTRICITY, (4) HOUSEHOLD MACHINES, AND (5) HEAT, LIGHT, AND SOUND. EACH UNIT IS ORGANIZED AROUND OBJECTIVES, EXPERIMENTS, EVALUATIVE MATERIAL (UNIT EXAMS), INSTRUCTIONAL MATERIALS, AND REFERENCES. THE UNIT ON MEASUREMENT APPLIES THE METRIC SYSTEM TO DENSITY AND SPECIFIC GRAVITY PROBLEMS. THE HOUSEHOLD CHEMISTRY UNIT ACTIVITIES DEAL WITH THE THREE STATES OF MATTER: SOLIDS, LIQUIDS, AND GASES. PRINCIPLES OF ELECTRICITY ARE STRESSED IN BOTH THE HOUSEHOLD ELECTRICITY AND HOUSEHOLD MACHINES UNITS, WHILE THE FINAL UNIT ON HEAT, LIGHT, AND SOUND APPLIES PRINCIPLES AND THEORIES RELATING TO THE USE OF ENERGY IN THE HOME. (JB)

GRANT NUMBER: OEG-0-73-5348

INSTITUTION NAME: NATCHITOCHES PARISH SCHOOL BOARD, LA.

SPONSORING AGENCY NAME: OFFICE OF EDUCATION (DHEW), WASHINGTON, D.C.

ACCESSION NUMBER: ED108367

CLEARINGHOUSE ACCESSION NUMBER: EA007285

PUBLICATION DATE: DEC 73

TITLE: THE ENERGY CRISIS. A LEGAL MEMORANDUM.

INSTITUTION CODE: FGK56325

DESCRIPTOR: EDUCATIONAL FACILITIES; *ENERGY CONSERVATION; *FUEL CONSUMPTION; SCHOOLS; SECONDARY EDUCATION

EDRS PRICE: EDRS PRICE MF-$0.76 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 5P.

ISSUE: RIENOV75

ABSTRACT: THE ENERGY CRUNCH IS BEING FELT BY EVERYONE--AT HOME, AT WORK, AND IN THE POCKETBOOK. SCHOOLS, LIKE OTHERS, ARE SHARING IN THE EFFORTS TO CONSERVE ENERGY: THERMOSTATS ARE BEING TURNED DOWN AND LIGHTS ARE BEING TURNED OFF. ALWAYS IN THE VANGUARD OF PATRIOTISM, SCHOOLS THROUGHOUT THE COUNTRY ARE AMONG THE FIRST TO INITIATE CUTBACKS IN FUEL AND ELECTRICITY TO SHARE IN ALLEVIATING THE CRISIS. THE QUESTION OF WHAT MORE CAN BE DONE, HOWEVER, CONTINUES TO PERPLEX SCHOOL PRINCIPALS AND OTHER ADMINISTRATORS. SOMETHING "MORE" CAN ALWAYS BE DONE, IT SEEMS, BUT THE TIME COMES WHEN THE PRACTICAL MUST BE WEIGHED AGAINST THE IMPRACTICAL, AND WHEN SOME SERIOUS QUESTIONS MUST BE ASKED ABOUT PRIORITIES AND VALUES, AND WHERE EDUCATION AND THE SCHOOLS RANK AMONG THEM. A NUMBER OF THE IMPORTANT QUESTIONS ARE PRESENTED HERE. (AUTHOR)

AVAILABILITY: NATIONAL ASSOCIATION OF SECONDARY SCHOOL PRINCIPALS, 1904 ASSOCIATION DRIVE, RESTON, VIRGINIA 22091 ($0.25, QUANTITY DISCOUNTS, PAYMENT MUST ACCOMPANY ORDER OF $10.00 OR LESS)

INSTITUTION NAME: NATIONAL ASSOCIATION OF SECONDARY SCHOOL PRINCIPALS, WASHINGTON, D.C.

ACCESSION NUMBER: ED108881

CLEARINGHOUSE ACCESSION NUMBER: SE019051

PUBLICATION DATE: 31 JAN 74

TITLE: PROJECT REPORT ON UTILIZING EXTENSION SERVICE IN LAND-GRANT UNIVERSITIES AS A TECHNOLOGY TRANSFER SYSTEM FOR ENVIRONMENTAL AFFAIRS.

PERSONAL AUTHOR: GRANTHAM, J. O.

INSTITUTION CODE: 88800108

SPONSORING AGENCY CODE: FGK57295

DESCRIPTOR: ENERGY; *ENVIRONMENT; EXTENSION AGENTS; EXTENSION EDUCATION; *INFORMATION DISSEMINATION; PILOT PROJECTS; PUBLIC HEALTH; *RESEARCH; *SURVEYS; *TECHNOLOGY; TRANSPORTATION; *OKLAHOMA; SOCIETAL NEEDS

EDRS PRICE: EDRS PRICE MF-$0.76 HC-$4.43 PLUS POSTAGE

DESCRIPTIVE NOTE: 99P.; REVISED EDITION, OCCASIONAL MARGINAL LEGIBILITY IN APPENDICES. NSF GRANT GT-39426

ISSUE: RIENOV75

ABSTRACT: CONCERN HAS BEEN GROWING AT THE NATIONAL LEVEL REGARDING THE LARGE SUMS WHICH HAVE BEEN SPENT ON RESEARCH AND DEVELOPMENT AND THE CORRESPONDING INABILITY OF THE RESULTING TECHNOLOGY AT THE LOCAL LEVEL TO SOLVE PROBLEMS INVOLVING THE ENVIRONMENT, TRANSPORTATION, ENERGY CRISIS, AND PUBLIC HEALTH. THE FOLLOWING REPORT DESCRIBES THE INVESTIGATION UNDERTAKEN BY OKLAHOMA STATE UNIVERSITY (OSU) TO SURVEY AND DETERMINE WHAT EXTENT THE OKLAHOMA COOPERATIVE EXTENSION SERVICE MIGHT BE UTILIZED TO HELP ALLEVIATE THE PROBLEMS. THE INVESTIGATION FOCUSED ON THREE PRIMARY OBJECTIVES: (1) IDENTIFICATION OF FELT PROBLEMS IN OKLAHOMA, (2) IDENTIFICATION OF OBSTACLES TO THE SOLUTIONS, AND (3) ASSESSMENT OF COUNTY AND COMMUNITY DECISION MAKING PROCESSES TO DETERMINE WHICH ENVIRONMENTAL TRANSFER METHODS MIGHT BE MOST EFFECTIVE. FROM THIS INFORMATION THE OSU TEAM DESIGNED A PILOT PROGRAM FOR AN ENVIRONMENTAL EXTENSION SERVICE THROUGH THE OKLAHOMA COOPERATIVE EXTENSION. SEVERAL RECOMMENDATIONS AROSE FROM THIS INVESTIGATION: SUCH AS: (1) FEDERAL AGENCIES SHOULD SUPPORT ENVIRONMENTAL EXTENSION PROGRAMS; (2) THE OKLAHOMA COOPERATIVE EXTENSION SHOULD BE INVOLVED IN A PILOT PROGRAM; AND (3) BOTH FEDERAL AND STATE AGENCIES SHOULD SUPPORT SUCH A PROJECT WITH FUNDS. (TK)

INSTITUTION NAME: OKLAHOMA STATE UNIV., STILLWATER.

SPONSORING AGENCY NAME: NATIONAL SCIENCE FOUNDATION, WASHINGTON, D.C.

ACCESSION NUMBER: ED108891

CLEARINGHOUSE ACCESSION NUMBER: SE019069

PUBLICATION DATE: 75

TITLE: ENERGY ACTIVITIES AND RESOURCES FOR THE SECONDARY STUDENT.

INSTITUTION CODE: 88807648

DESCRIPTOR: *ENERGY; *ENERGY CONSERVATION; ENVIRONMENTAL EDUCATION; *INSTRUCTIONAL MATERIALS; *NATURAL RESOURCES; SCIENCE EDUCATION; SECONDARY SCHOOL STUDENTS; *TEACHING GUIDES

EDRS PRICE: EDRS PRICE MF-$0.76 HC-$3.32 PLUS POSTAGE

DESCRIPTIVE NOTE: 74P.

ISSUE: RIENOV75

ABSTRACT: THE MATERIALS IN THIS GUIDE PROVIDE SECONDARY LEVEL STUDENTS (7-12 GRADE) THE OPPORTUNITY TO BECOME AWARE, KNOWLEDGEABLE, AND MOTIVATED TO FIND POSSIBLE SOLUTIONS TO OUR URGENT AND COMPLEX ENERGY RELATED PROBLEMS. FIVE INTERDISCIPLINARY UNITS ARE PRESENTED IN THE GUIDE: USES OF ENERGY, PRESENT AND FUTURE SOURCES OF ENERGY, CONSERVATION OF ENERGY, ENVIRONMENTAL IMPACT OF ENERGY RELATED ACTIVITIES, AND ENERGY: LIMITS-RESOURCE-FINITUDE. THESE UNITS ARE FLEXIBLE AND ARE TO BE USED BY THE SECONDARY TEACHER SUBJECT TO HER/HIS PLANS AND SCHEDULES. EACH UNIT CONTAINS AN OVERVIEW, OBJECTIVES, AND SUGGESTED ACTIVITIES. THE ACTIVITIES INCLUDE SUCH PROCESSES AND SKILLS AS MATHEMATICAL ESTIMATES, DISCUSSION, COMPARISONS, CREATIVE WRITING, AND INQUIRY AND DISCOVERY ACTIVITIES. ALSO INCLUDED IN THE GUIDE ARE ADDITIONAL ACTIVITIES, APPENDICES, ENERGY RELATED RESOURCES, AND ENERGY RELATED TERMS. (TK)

INSTITUTION NAME: KINGSPORT CITY SCHOOLS, TENN.

ACCESSION NUMBER: ED109447

CLEARINGHOUSE ACCESSION NUMBER: CE004296

PUBLICATION DATE: 12 DEC 74

TITLE: POSTSECONDARY TECHNICAL EDUCATION AND THE ENERGY CRISIS.

PERSONAL AUTHOR: RIENDEAU, ALBERT J.

DESCRIPTOR: CAREER OPPORTUNITIES; *CHANGING ATTITUDES; EDUCATIONAL NEEDS; EMPLOYMENT OPPORTUNITIES; EMPLOYMENT PROJECTIONS; EMPLOYMENT TRENDS; ENERGY; *ENERGY CONSERVATION; MANPOWER DEVELOPMENT; *MANPOWER NEEDS; *POST SECONDARY EDUCATION; SPEECHES; *TECHNICAL EDUCATION; TECHNOLOGICAL ADVANCEMENT; VOCATIONAL EDUCATION; *ENERGY CRISIS

EDRS PRICE: EDRS PRICE MF-$0.76 HC-$1.58 PLUS POSTAGE

DESCRIPTIVE NOTE: 18P.; FOR RELATED DOCUMENT, SEE CE 004 297

ISSUE: RIEDEC75

ABSTRACT: THE ENERGY PROBLEM AFFECTS VIRTUALLY EVERY WAGE EARNER IN AMERICA AND CRIES OUT FOR INCREASED INVOLVEMENT BY VOCATIONAL AND TECHNICAL EDUCATORS. A RECENT STUDY BY THE NATIONAL PLANNING ASSOCIATION POINTS UP THE NEED TO PROJECT FUTURE MANPOWER DEMANDS IN ENERGY AND ENERGY-RELATED INDUSTRIES SO THAT THE COUNTRY'S EDUCATIONAL AND TRAINING INSTITUTIONS CAN PROVIDE THE MIX OF GRADUATES TO MATCH FUTURE NEEDS. EDUCATORS ALSO SHARE THE AWESOME RESPONSIBILITY FOR AN ADVOCACY ROLE TO MAINTAIN THE CULTURE. WHAT APPEARS TO BE NEEDED IN SCHOOLS AND COLLEGES, AT THIS MOMENT IN HISTORY, IS A BOLD NEW APPROACH FOR MEETING THE ENERGY PROBLEM HEAD-ON. IF THE TWO-YEAR POSTSECONDARY INSTITUTIONS, BOTH PUBLIC AND PRIVATE, ARE TO MAKE THEIR GREATEST CONTRIBUTION DURING THIS PERIOD OF LIMITED ENERGY RESOURCES, THEY MUST NOT ONLY HELP PREPARE THE THOUSANDS OF TECHNICIANS AND SKILLED PERSONS FOR THE ENERGY FIELDS, BUT THEY MUST ASSIST IN THE PROCESS OF CHANGING ATTITUDES. COLLEGES MUST TUNE IN TO THE SHIFTING JOB OPPORTUNITIES EVOLVING AS A DIRECT RESULT OF THE CHANGING FOCUS IN THE ENERGY FIELDS. ONLY AN INFORMED NETWORK OF POSTSECONDARY SCHOOLS AND COLLEGES CAN BE EXPECTED TO PROVIDE A GRADUATE MIX THAT WILL MATCH THE REAL NEEDS OF FUTURE ENERGY AND ENERGY-RELATED INDUSTRIES. (AUTHOR/PR)

ACCESSION NUMBER: ED109448

CLEARINGHOUSE ACCESSION NUMBER: CE004297

PUBLICATION DATE: APR 75

TITLE: POST-SECONDARY OCCUPATIONAL EDUCATION AND THE ENERGY CRISIS.

PERSONAL AUTHOR: RIENDEAU, ALBERT J.

DESCRIPTOR: *CHANGING ATTITUDES; COMMUNITY COLLEGES; EMPLOYMENT OPPORTUNITIES; EMPLOYMENT PATTERNS; EMPLOYMENT PROJECTIONS; ENERGY CONSERVATION; JOBS; JOB TRAINING; *MANPOWER DEVELOPMENT; *MANPOWER NEEDS; OCCUPATIONAL GUIDANCE; *POST SECONDARY EDUCATION; SPEECHES; TECHNICAL EDUCATION; TECHNICAL INSTITUTES; *TECHNOLOGICAL ADVANCEMENT; *ENERGY CRISIS; ENERGY DEVELOPMENT

EDRS PRICE: EDRS PRICE MF-$0.76 HC-$1.58 PLUS POSTAGE

DESCRIPTIVE NOTE: 19P.; PAPER PRESENTED AT THE ANNUAL CONFERENCE ON COMMUNITY COLLEGE OCCUPATIONAL TECHNICAL EDUCATION (3RD, BLACKSBURG, VIRGINIA, APRIL 20-22, 1975); FOR RELATED DOCUMENT, SEE CE 004 296

ISSUE: RIEDEC75

ABSTRACT: MANY IMPLICATIONS EXIST FOR POSTSECONDARY EDUCATIONAL INSTITUTIONS IN THE CHALLENGE OF ARRIVING AT A RESPONSIBLE SOLUTION TO THE ENERGY PROBLEM. THE INTENT OF THE ENERGY MATERIALS CONSERVATION EDUCATION ACT OF 1975 IS TO CALL FOR A COMMITMENT BY EDUCATORS (COMMUNITY COLLEGES,

TECHNICAL INSTITUTES, AND TRADE AND TECHNICAL SCHOOLS) TO: (1) HELP PREPARE TECHNICIANS AND SKILLED PERSONS FOR THE ENERGY FIELDS, AND (2) ASSIST STUDENTS IN THE PROCESS OF CHANGING ATTITUDES. RECENT CHANGES IN THE FIELD OF EDUCATION REQUIRING ADAPTATION ARE THE SURPLUSES/SHORTAGES IN SOME OCCUPATIONAL CATEGORIES, EQUAL EMPLOYMENT OPPORTUNITIES, THE COMMUNITY COLLEGE MOVEMENT, AND GROWTH OF OCCUPATIONAL EDUCATION. TWO-YEAR POSTSECONDARY INSTITUTIONS WILL HAVE IMPORTANT AND UNFOLDING ROLES IN THE ENERGY CRISIS. THE ACHIEVEMENT OF NATIONAL ENERGY SELF-SUFFICIENCY WILL INCREASE THE DEMAND FOR SCIENTISTS, ENGINEERS, TECHNICIANS, CRAFTSMEN, CONSTRUCTION WORKERS, AND MACHINE AND VEHICLE OPERATORS. NUCLEAR PLANTS AND PETROLEUM REFINERIES WILL REQUIRE ELECTRICIANS, WELDERS, AND STEAM AND PIPE FITTERS. EMPLOYMENT LEVELS BY 1990 FOR CRUDE PETROLEUM AND NATURAL GAS EXPLORATION MAY INCREASE BY 160,000 PERSONS OVER 1970 LEVELS. NEW ENERGY TECHNOLOGIES MUST BE DEVELOPED--SYNTHETIC FUELS MADE FROM COAL AND OIL SHALE; ADVANCED FISSION REACTORS; FUSION; AND SOLAR AND GEOTHERMAL SOURCES. LIKEWISE, THERE WILL BE EMPHASIS ON FINDING WAYS TO CONSERVE ENERGY. (EA)

ACCESSION NUMBER: ED110256

CLEARINGHOUSE ACCESSION NUMBER: RC008705

PUBLICATION DATE: 27 MAY 75

TITLE: TOWARD A PLATFORM FOR RURAL AMERICA. REPORT OF THE NATIONAL CONFERENCE ON RURAL AMERICA (1ST, WASHINGTON, D.C., APRIL 14-17, 1975).

INSTITUTION CODE: BBB11501; BBB11502

DESCRIPTOR: COMMUNITY DEVELOPMENT; *CONFERENCE REPORTS; ECONOMICALLY DISADVANTAGED; ECONOMIC DEVELOPMENT; EDUCATION; EMPLOYMENT; ENERGY; *FUTURES (OF SOCIETY); HEALTH; LAND USE; LEGAL AID; LOCAL GOVERNMENT; NATURAL RESOURCES; *POLICY FORMATION; *POLITICAL ISSUES; *RURAL DEVELOPMENT; TRANSPORTATION

EDRS PRICE: EDRS PRICE MF-$0.76 HC-$3.32 PLUS POSTAGE

DESCRIPTIVE NOTE: 65P.

ISSUE: RIEDEC75

ABSTRACT: A DISTILLATION OF HUNDREDS OF SPEECHES, WORKING PAPERS, PANEL SESSIONS, INFORMAL DISCUSSIONS, AND FORMAL RESOLUTIONS, THIS REPORT IS DERIVED FROM THE FIRST NATIONAL CONFERENCE ON RURAL AMERICA (APRIL 1975) AND REFLECTS EMERGENCE OF A RURAL POLITICAL PLATFORM. ATTENDED BY APPROXIMATELY 1,500 PEOPLE FROM 49 STATES, PUERTO RICO, AND CANADA, THE CONFERENCE WAS DIVIDED INTO 12 BASIC SUBJECT AREAS, WHICH CONSTITUTE THE FOLLOWING MAJOR REPORT DIVISIONS: (1) SELF-GOVERNMENT IN RURAL AMERICA; (2) RURAL POVERTY; (3) LAND, RESOURCES, AND PEOPLE; (4) RURAL HEALTH; (5) AGRICULTURAL PRODUCTION; (6) EMPLOYMENT, JOBS, AND TRAINING; (7) HOUSING AND COMMUNITY DEVELOPMENT; (8) ENERGY AND RURAL PEOPLE; (9) PUBLIC EDUCATION; (10) RURAL ECONOMIC DEVELOPMENT; (11) RURAL PUBLIC TRANSPORTATION; (12) RURAL JUSTICE AND LEGAL ASSISTANCE. MAJOR THEMES FOUND INTERWOVEN AMONG THESE 12 AREAS OF CONCERN ARE IDENTIFIED AS FOLLOWS: (1) THE BELIEF THAT SOONER OR LATER EVERYONE WILL MOVE TO THE CITIES AND LIVE HAPPILY EVER AFTER IS "FACTUALLY FALSE AND MORALLY OFFENSIVE"; (2) A NEW NATIONAL POLICY IS NEEDED WHICH RECOGNIZES THE RIGHT OF PEOPLE TO LIVE WHERE THEY CHOOSE AND IS SENSITIVE TO THE SURVIVAL OF RURAL AMERICA; (3) CONGRESS MUST REDRESS LONG-STANDING RURAL INEQUITIES; (4) SOLUTIONS TO RURAL PROBLEMS MUST BE "RURAL" SOLUTIONS; (5) TO AVOID THE URBAN EMPHASIS IN NATIONAL PLANNING, RURAL "DESKS" SHOULD BE ESTABLISHED IN APPROPRIATE FEDERAL AGENCIES. (JC)

AVAILABILITY: RURAL AMERICA, INC., & RURAL HOUSING ALLIANCE, 1346 CONNECTICUT AVE., NW, WASHINGTON, D.C. 20036 (1-10 COPIES $2.90; 11-49 COPIES $2.25; 50 OR MORE COPIES $1.75 PLUS 10 PERCENT HANDLING)

INSTITUTION NAME: RURAL AMERICA, INC., WASHINGTON, D.C.; RURAL HOUSING ALLIANCE, WASHINGTON, D.C.

ACCESSION NUMBER: ED110346

CLEARINGHOUSE ACCESSION NUMBER: SE019457

PUBLICATION DATE: 72

TITLE: CONSERVATION, EQUILIBRIUM, AND FEEDBACK APPLIED TO ATMOSPHERIC AND FLUVIAL PROCESSES. RESOURCE PAPER NO. 15.

PERSONAL AUTHOR: RAYNER, JOHN N.

INSTITUTION CODE: BBB05071

SPONSORING AGENCY CODE: FGK57295

DESCRIPTOR: *CLIMATIC FACTORS; *COLLEGE SCIENCE; EARTH SCIENCE; ENERGY; GEOGRAPHY; HIGHER EDUCATION; *INSTRUCTIONAL MATERIALS; *METEOROLOGY; *PHYSICAL GEOGRAPHY; PHYSICS; SCIENCE EDUCATION; SOCIAL SCIENCES

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS

DESCRIPTIVE NOTE: 23P.

ISSUE: RIEDEC75

ABSTRACT: INTENDED TO SUPPLEMENT UNDERGRADUATE COLLEGE GEOGRAPHY COURSES, THIS RESOURCE PAPER INVESTIGATES SEVERAL CONCEPTS WHICH ARE PREREQUISITE TO THE STUDY OF PHYSICAL GEOGRAPHY. THE STUDENT IS PROVIDED WITH A "SYSTEMS" APPROACH TO PHYSICAL GEOGRAPHY, WHICH COMBINES THE UNDERLYING PRINCIPLES OF PHYSICS WITH THE CONTEXTUAL APPLICATION OF THESE PRINCIPLES TO THE SPECIFIC DOMAIN OF PHYSICAL GEOGRAPHY. THE PARTICULAR FRAMEWORK INTRODUCED IS BASED UPON THE IDEA THAT NATURE TENDS TO REMAIN IN STEADY STATES THROUGH THE ACTION OF INTERNAL REGULATION MECHANISMS KNOWN AS FEEDBACK. THE UNDERLYING PHYSICAL PRINCIPLE IS ONE OF CONSERVATION: THE CONSERVATION OF MASS, ENERGY, AND MOMENTUM. EXAMPLES ARE GIVEN TO ILLUSTRATE THESE CONSERVATION LAWS AND HOW THEY ULTIMATELY ACCOUNT FOR THE WEATHER AND EROSION. THE GENERAL CIRCULATION OF THE ATMOSPHERE IS DESCRIBED AND PROVIDED AS AN EXPLANATION FOR CLIMATIC CONDITIONS, SUCH AS PRECIPITATION AND WIND EFFECTS. FLUVIAL EROSION IS PRESENTED AS ANOTHER EXAMPLE OF FEEDBACK OPERATIONS, IN WHICH ENERGY IS TRACED FROM ITS SOURCE IN THE ATMOSPHERE THROUGH A NUMBER OF STEPS TO STREAM FLOW. (AUTHOR/MLH)

AVAILABILITY: ASSOCIATION OF AMERICAN GEOGRAPHERS, 1710 SIXTEENTH STREET, N.W., WASHINGTON, D.C. 20009 ($1.50 EA. FOR 1-9 COPIES; $1.35 EA. FOR 10-99 COPIES; $1.20 EA. FOR 100 COPIES OR MORE)

INSTITUTION NAME: ASSOCIATION OF AMERICAN GEOGRAPHERS, WASHINGTON, D.C. COMMISSION ON COLLEGE GEOGRAPHY.

SPONSORING AGENCY NAME: NATIONAL SCIENCE FOUNDATION, WASHINGTON, D.C.

ACCESSION NUMBER: ED111662

CLEARINGHOUSE ACCESSION NUMBER: SE019617

PUBLICATION DATE: 75

TITLE: ENERGY-ENVIRONMENT SOURCE BOOK, VOLUME 1: ENERGY, SOCIETY, AND THE ENVIRONMENT. VOLUME 2: ENERGY, ITS EXTRACTION, CONVERSION AND USE.

PERSONAL AUTHOR: FOWLER, JOHN M.

INSTITUTION CODE: FGK57300

SPONSORING AGENCY CODE: BBB05608

DESCRIPTOR: CONSERVATION (ENVIRONMENT); ELEMENTARY EDUCATION; *ELEMENTARY SCHOOL SCIENCE; *ENERGY; ENVIRONMENTAL EDUCATION; INSTRUCTIONAL AIDS; *INSTRUCTIONAL MATERIALS; *NATURAL RESOURCES; SCIENCE EDUCATION; SECONDARY EDUCATION; *SECONDARY SCHOOL SCIENCE; NATIONAL SCIENCE TEACHERS ASSOCIATION; NSTA

EDRS PRICE: EDRS PRICE MF-$0.76 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 270P.; FOR RELATED DOCUMENTS, SEE SE 019 618 AND 619

ISSUE: RIEJAN76

ABSTRACT: THIS SOURCE BOOK, ONE PART OF A THREE-PART NSTA SERIES ON ENERGY-ENVIRONMENT, IS WRITTEN FOR TEACHERS WHO WISH TO INCORPORATE MATERIAL ON THE COMPLEX SUBJECT OF ENERGY INTO THEIR TEACHING. THIS WORK IS DIVIDED INTO TWO VOLUMES, EACH WITH NUMEROUS TABLES AND FIGURES, ALONG WITH APPENDICES CONTAINING A GLOSSARY, MATHEMATICS PRIMER, HEAT ENGINE DESCRIPTIONS, AND NUCLEAR ENERGY DISCUSSION. VOLUME 1 (ENERGY, SOCIETY, AND THE ENVIRONMENT) DEALS WITH ENERGY AND ITS RELATIONSHIP WITH CONSERVATION, THE ENVIRONMENT, THE ECONOMY, AND STRATEGIES FOR ENERGY CONSERVATION. IN VOLUME 2 (ENERGY, ITS EXTRACTION, CONVERSION, AND USE), TOPICS DISCUSSED INCLUDE THE RATE OF ENERGY CONSUMPTION, FUTURE SOURCES OF ENERGY, AND THE INCREASED COST OF ENERGY. (AUTHOR/CP)

CONTRACT NUMBER: OEC-0-74-8736

BUREAU NUMBER: BR-0-047FPA

AVAILABILITY: NATIONAL SCIENCE TEACHERS ASSOCIATION, 1742 CONNECTICUT AVENUE, N. W., WASHINGTON, D. C. 20009 (STOCK NUMBER 471-14692, $4.00 PREPAID)

INSTITUTION NAME: NATIONAL SCIENCE TEACHERS ASSOCIATION, WASHINGTON, D.C.

SPONSORING AGENCY NAME: OFFICE OF EDUCATION (DHEW), WASHINGTON, D.C. OFFICE OF ENVIRONMENTAL EDUCATION.

ACCESSION NUMBER: ED111663

CLEARINGHOUSE ACCESSION NUMBER: SE019618

PUBLICATION DATE: 75

TITLE: ENERGY-ENVIRONMENT MATERIALS GUIDE.

PERSONAL AUTHOR: MERVINE, KATHRYN E.; CAWLEY, REBECCA E.

INSTITUTION CODE: FGK57300

SPONSORING AGENCY CODE: BBB05608

DESCRIPTOR: CONSERVATION (ENVIRONMENT); ELEMENTARY EDUCATION; *ELEMENTARY SCHOOL SCIENCE; *ENERGY; ENVIRONMENTAL EDUCATION; *INSTRUCTIONAL MATERIALS; *NATURAL RESOURCES; READING MATERIALS; RESOURCE GUIDES; SCIENCE EDUCATION; SECONDARY EDUCATION; *SECONDARY SCHOOL SCIENCE; TEACHING GUIDES; NATIONAL SCIENCE TEACHERS ASSOCIATION; NSTA

EDRS PRICE: EDRS PRICE MF-$0.76 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 68P.; FOR RELATED DOCUMENTS, SEE SE 019 617 AND 619

ISSUE: RIEJAN76

ABSTRACT: THIS PUBLICATION, ONE PART OF A THREE-PART NSTA SERIES ON ENERGY-ENVIRONMENT, IS A SAMPLING OF CURRENT ENERGY LITERATURE. THE REFERENCES ARE DIVIDED INTO FOUR SEPARATE CATEGORIES, EACH DIRECTED FOR A SPECIFIC AUDIENCE: READINGS FOR TEACHERS, READINGS FOR STUDENTS (GRADES 8-10); READINGS FOR STUDENTS (GRADES 5-9); AND READINGS FOR STUDENTS (GRADES K-6). INCLUDED IN FOUR APPENDICES ARE GUIDES FOR FILMS AND AUDIO-VISUAL MATERIALS, CURRICULUM MATERIALS, SOURCES OF INFORMATION, AND GOVERNMENT DOCUMENTS. (AUTHOR/CP)

CONTRACT NUMBER: OEC-0-74-8736

BUREAU NUMBER: BR-0-047FPA

AVAILABILITY: NATIONAL SCIENCE TEACHERS ASSOCIATION, 1742 CONNECTICUT AVENUE, N. W., WASHINGTON, D. C. 20009 (STOCK NUMBER 471-14694, $2.00 PREPAID)

INSTITUTION NAME: NATIONAL SCIENCE TEACHERS ASSOCIATION, WASHINGTON, D.C.

SPONSORING AGENCY NAME: OFFICE OF EDUCATION (DHEW), WASHINGTON, D.C. OFFICE OF ENVIRONMENTAL EDUCATION.

ACCESSION NUMBER: ED111664

CLEARINGHOUSE ACCESSION NUMBER: SE019619

PUBLICATION DATE: 75

TITLE: ENERGY-ENVIRONMENT MINI-UNIT GUIDE.

PERSONAL AUTHOR: SMITH, STEPHEN M., ED.; AND OTHERS

INSTITUTION CODE: FGK57300

SPONSORING AGENCY CODE: 88805608

DESCRIPTOR: CONSERVATION (ENVIRONMENT); ELEMENTARY EDUCATION; *ELEMENTARY SCHOOL SCIENCE; *ENERGY; ENVIRONMENTAL EDUCATION; INSTRUCTIONAL MATERIALS; INTERDISCIPLINARY APPROACH; *NATURAL RESOURCES; PRESCHOOL EDUCATION; SCIENCE EDUCATION; SECONDARY EDUCATION; *SECONDARY SCHOOL SCIENCE; SOCIAL STUDIES; *TEACHING GUIDES; NATIONAL SCIENCE TEACHERS ASSOCIATION; NSTA

EDRS PRICE: EDRS PRICE MF-$0.76 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 217P.; FOR RELATED DOCUMENTS, SEE SE 019 617 AND 618

ISSUE: RIEJAN76

ABSTRACT: THIS UNIT IS ONE PART OF A THREE-PART NATIONAL SCIENCE TEACHERS ASSOCIATION (NSTA) SERIES ON ENERGY-ENVIRONMENT. THE GOAL OF THIS NSTA PROJECT IS TO CREATE A COLLECTION OF MINI-UNITS THAT PROVIDE MATERIALS FOR SCIENCE AND SOCIAL STUDIES TEACHERS IN GRADES K-12. THESE MATERIALS ARE INTENDED TO MAKE TEACHING MORE INTERDISCIPLINARY AND TO STIMULATE DECISION MAKING IN YOUNG CHILDREN. ACTIVITIES ARE SOUGHT THAT WILL ENABLE STUDENTS TO: UNDERSTAND AND USE EXISTING FUNDAMENTAL CONCEPTS IN THE ENERGY-ENVIRONMENT AREA; IDENTIFY AND EVALUATE PERSONAL AND COMMUNITY PRACTICES, ATTITUDES, AND VALUES RELATED TO ENERGY-ENVIRONMENT ISSUES; AND MAKE EFFECTIVE DECISIONS AND/OR DEFINE THEIR VIEWS OF APPROPRIATE ACTIONS ON ENERGY-ENVIRONMENT ISSUES. (EDITOR/CP)

CONTRACT NUMBER: OEC-G-74-8736

BUREAU NUMBER: BR-0-647FPA

AVAILABILITY: NATIONAL SCIENCE TEACHERS ASSOCIATION, 1742 CONNECTICUT AVENUE, N. W., WASHINGTON, D. C. 20009 (STOCK NUMBER 471-14696, $3.00 PREPAID)

INSTITUTION NAME: NATIONAL SCIENCE TEACHERS ASSOCIATION, WASHINGTON, D.C.

SPONSORING AGENCY NAME: OFFICE OF EDUCATION (DHEW), WASHINGTON, D.C. OFFICE OF ENVIRONMENTAL EDUCATION.

ACCESSION NUMBER: ED112401

CLEARINGHOUSE ACCESSION NUMBER: CE004748

TITLE: JUNIOR HIGH SCHOOL PROGRAM.

INSTITUTION CODE: 88B06951

SPONSORING AGENCY CODE: ZOU97875

DESCRIPTOR: BUSINESS EDUCATION; CLASS ACTIVITIES; ENERGY; *INDUSTRIAL EDUCATION; *INSTRUCTIONAL MATERIALS; JUNIOR HIGH SCHOOLS; *LEARNING ACTIVITIES; LUMBER INDUSTRY; METAL INDUSTRY; SECONDARY EDUCATION

EDRS PRICE: EDRS PRICE MF-$0.76 HC-$12.03 PLUS POSTAGE

DESCRIPTIVE NOTE: 228P.; FOR RELATED DOCUMENTS, SEE ED 097 538-554; CE 004 735-736, AND CE 004 743-747; FOR THE WISCONSIN GUIDE TO LOCAL CURRICULUM IMPROVEMENT IN INDUSTRIAL EDUCATION, SEE ED 092 799

ISSUE: RIEFEB76

ABSTRACT: THE DOCUMENT CONTAINS EIGHT STUDENT DIRECTED AND TWO TEACHER DIRECTED ACTIVITY PACKAGES, AND A PROPOSED CURRICULUM GUIDE; ALL PERTAIN TO FIELD OBJECTIVES 1, 2, OR 3 OF THE WISCONSIN GUIDE TO LOCAL CURRICULUM IMPROVEMENT IN INDUSTRIAL EDUCATION, K-12. GEARED TO THE JUNIOR HIGH LEVEL, THE STUDENT PACKAGES ARE ENTITLED: REPAIR OF A LAMP CORD AND SOCKET (OUTLINING THE PROCEDURE AND EQUIPMENT NECESSARY TO DO THE JOB); POWER AND ENERGY (DEFINING POWER AND HOW IT IS USED TO PRODUCE GOODS AND SERVICES); EARLY LUMBERING (EXPLORING THE DEVELOPMENT OF THE INDUSTRY); WHAT IS PROPERTY? (EXAMINING ITS INFLUENCE ON INDUSTRY); HOW DOES MANAGEMENT AFFECT INDUSTRY AND SOCIETY? (DISCUSSING HOW INDUSTRY FUNCTIONS IN SOCIETY); HUMAN RESOURCES (DEFINING THE MANPOWER ELEMENT OF INDUSTRY); AND MASS PRODUCTION ACTIVITIES (DIAGRAMING AND LISTING MATERIALS AND PROCEDURES FOR BUILDING FIVE PUZZLES). THE TEACHER PACKAGES ARE: THE DEVELOPMENT OF COMMUNICATIONS, WHICH OUTLINES A CLASS APPROACH FOR THE TEACHER EMPHASIZING HISTORICAL GROWTH AND WHICH IS SUPPLEMENTED BY AN AUDIOVISUAL PRESENTATION, AND LET'S MAKE A KITE, WHICH SUGGESTS PROBLEM SOLVING, MASS PRODUCTION, AND INDIVIDUALIZED ACTIVITIES FOR THE CLASSROOM TEACHER. A PROPOSED CURRICULUM, METALS INDUSTRIES, OUTLINES SCOPE AND SEQUENCE FOR EACH OF FOUR PROPOSED UNITS, INCLUDING LABORATORY WORK, FIELD TRIPS, AND A CLASS ENTERPRISE. (LM)

INSTITUTION NAME: WISCONSIN UNIV. - STOUT, MENOMONIE. CENTER FOR VOCATIONAL, TECHNICAL AND ADULT EDUCATION.

SPONSORING AGENCY NAME: WISCONSIN STATE DEPT. OF PUBLIC INSTRUCTION, MADISON.

ACCESSION NUMBER: ED114268

CLEARINGHOUSE ACCESSION NUMBER: SE019340

PUBLICATION DATE: 75

TITLE: A BETTER PLACE TO BE. A GUIDE TO ENVIRONMENTAL LEARNING IN YOUR CLASSROOM.

PERSONAL AUTHOR: EUSTON, CAROL

INSTITUTION CODE: FGK21460

DESCRIPTOR: AIR POLLUTION CONTROL; *ECOLOGY; *ELEMENTARY GRADES; ENERGY CONSERVATION; *INSTRUCTIONAL MATERIALS; INTERDISCIPLINARY APPROACH; LEARNING ACTIVITIES; RESOURCE MATERIALS; *SCIENCE EDUCATION; WATER POLLUTION CONTROL

EDRS PRICE: EDRS PRICE MF-$0.76 HC-$1.95 PLUS POSTAGE

DESCRIPTIVE NOTE: 43P.

ISSUE: RIEMAR76

ABSTRACT: THIS BOOKLET, DESIGNED FOR ELEMENTARY TEACHERS, CONTAINS IDEAS FOR INVOLVING STUDENTS IN FIRSTHAND EXPERIENCE WITH THEIR ENVIRONMENT AND PRACTICAL SUGGESTIONS FOR PRESERVATION AND IMPROVEMENT OF THEIR OWN HOMES AND NEIGHBORHOODS. THE GOALS OF THIS BOOKLET ARE TO INCREASE ENVIRONMENTAL AWARENESS AND TO HELP THE STUDENTS BECOME RESPONSIBLE CITIZENS. AMONG THE TOPICS DISCUSSED ARE: ENVIRONMENTAL LEARNING IN YOUR CLASSROOM; GETTING STARTED; ECOSYSTEMS AND CLASSROOM ACTIVITIES; ENVIRONMENTAL PROBLEMS AND ACTIVITIES; ENVIRONMENTAL LEARNING AND THE TOTAL CURRICULUM; SCHOOL SITE DEVELOPMENT; FAMILY PARTICIPATION; SCHOOLWIDE PROGRAMS; AND AWARDS AND RECOGNITION. A LISTING OF ENVIRONMENTAL ORGANIZATIONS, MATERIALS AND SOURCES; SUGGESTED READINGS AND AUDIOVISUAL AIDS CONCLUDES THIS BOOKLET. (BT)

AVAILABILITY: SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON, D.C. 20402 (STOCK NO. 2400-00805, $1.25)

INSTITUTION NAME: DEPARTMENT OF THE INTERIOR, WASHINGTON, D.C.

ACCESSION NUMBER: ED114270

CLEARINGHOUSE ACCESSION NUMBER: SE019494

PUBLICATION DATE: 74

TITLE: ENERGY PRIMER: SOLAR, WATER, WIND, AND BIOFUELS.

INSTITUTION CODE: CIQ73665

DESCRIPTOR: AGRICULTURE; *ENERGY; *ENERGY CONSERVATION; *ENVIRONMENT; ENVIRONMENTAL INFLUENCES; *NATURAL RESOURCES; SOLAR RADIATION; WATER RESOURCES; AQUACULTURE; BIOFUELS; WIND ENERGY

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS

DESCRIPTIVE NOTE: 200P.

ISSUE: RIEMAR76

ABSTRACT: THIS IS A COMPREHENSIVE, FAIRLY TECHNICAL BOOK ABOUT RENEWABLE FORMS OF ENERGY--SOLAR, WATER, WIND, AND BIOFUELS. THE BIOFUELS SECTION COVERS BIOMASS ENERGY, AGRICULTURE, AQUACULTURE, ALCOHOL, METHANE, AND WOOD. THE FOCUS IS ON SMALL-SCALE SYSTEMS WHICH CAN BE APPLIED TO THE NEEDS OF THE INDIVIDUAL, SMALL GROUP, OR COMMUNITY. MORE THAN ONE-FOURTH OF THE BOOK IS DEVOTED TO REVIEWS OF BOOKS AND HARDWARE SOURCES. HUNDREDS OF ILLUSTRATIONS AND A DOZEN ORIGINAL ARTICLES ARE USED TO DESCRIBE THE WORKINGS OF SOLAR WATER HEATERS, SPACE HEATERS AND DRYERS, WATERWHEELS, WINDMILLS, WIND GENERATORS, WOOD BURNING HEATERS, ALCOHOL STILLS, AND METHANE DIGESTERS. THE FINAL SECTION OF THE BOOK FOCUSES ON THE NEED FOR ENERGY CONSERVATION AND SOME OF THE PROBLEMS AND POTENTIALS OF INTEGRATED ENERGY SYSTEMS. (AUTHOR/BT)

AVAILABILITY: WHOLE EARTH TRUCK STORE, 558 SANTA CRUZ, MENLO PARK, CALIFORNIA 94025 (ORDER NO. ISBN 0-914774-00-X, $4.50)

INSTITUTION NAME: PORTOLA INST., INC., MENLO PARK, CALIF.

ACCESSION NUMBER: ED114272

CLEARINGHOUSE ACCESSION NUMBER: SE019678

PUBLICATION DATE: MAY 75

TITLE: A WORK FORCE FOR ENVIRONMENT AND ENERGY. A MASTER PLAN FOR ENVIRONMENTAL/ENERGY HIGHER EDUCATION IN ILLINOIS.

INSTITUTION CODE: BBB11303; JIM34700

DESCRIPTOR: COMMUNITY COLLEGES; CURRICULUM; *ENERGY; *ENVIRONMENTAL EDUCATION; ENVIRONMENTAL RESEARCH; FACILITIES; *HIGHER EDUCATION; MANPOWER NEEDS; *MASTER PLANS; RESEARCH; *STATE PROGRAMS; *ILLINOIS

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS

DESCRIPTIVE NOTE: 418P.; CONTAINS PRINT TOO SMALL FOR ADEQUATE REPRODUCTION

ISSUE: RIEMAR76

ABSTRACT: THIS MASTER PLAN FOR ENVIRONMENTAL AND ENERGY HIGHER EDUCATION IN ILLINOIS IS A DIRECT RESULT OF A MANDATE FROM THE ILLINOIS GENERAL ASSEMBLY. TO PREPARE STUDENTS TO CONFRONT OUR NATION'S ENVIRONMENTAL PROBLEMS, EACH UNIVERSITY WILL SUBMIT A MANAGEMENT AND DEVELOPMENT PLAN, DESIGNED TO PRESERVE EXISTING ENVIRONMENTAL VALUES AND PROVIDE IMPROVEMENTS IN THE PHYSICAL ENVIRONMENT OF THAT INSTITUTION. COORDINATED EFFORTS, INCREASED OPPORTUNITIES FOR STUDY, EVALUATION OF JOB MARKET DEMANDS, AND SPECIFIC REQUIREMENTS FOR INTERDISCIPLINARY TRAINING ARE SUGGESTED TO MEET THE DEMANDS OF CAREER ORIENTATION IN THE

ENVIRONMENTAL/ENERGY AREA, AND PROVIDE WIDER EXPOSURE OF ENVIRONMENTAL AFFAIRS. VARIOUS UNIVERSITY PROGRAMS IN THE ENVIRONMENTAL FIELDS ARE DESCRIBED. ESTABLISHMENT OF ENVIRONMENTAL RESOURCE CENTERS, A RESPONSIBILITY OF EACH INSTITUTION OF HIGHER EDUCATION, OFFERS A VALUABLE OPPORTUNITY TO THE COMMUNITY COLLEGE TO RELATE ITS EFFORTS TO THE COMMUNITY IT SERVES. AN EXAMINATION OF ENVIRONMENTAL TRAINING EFFORTS BY ILLINOIS COMMUNITY COLLEGES AND COURSE DESCRIPTIONS IS PROVIDED. ONE SECTION IS DEVOTED TO MANPOWER SURVEYS AND EMPLOYMENT PROJECTIONS (1980) IN THE POLLUTION CONTROL AND ABATEMENT AREAS OF AIR, NOISE, PESTICIDES, PUBLIC WATER, SOLID WASTES, AND WASTE WATER. AN EXTENSIVE INVENTORY OF CURRENT ENERGY RESEARCH AND DEVELOPMENT PROJECTS, AND AVAILABLE FACILITIES FOR RESEARCH IN ILLINOIS ARE PROVIDED. (BP)

AVAILABILITY: ERIC/CRESS, THE OHIO STATE UNIVERSITY, 1200 CHAMBERS ROAD, 3RD FLOOR, COLUMBUS, OHIO 43212 (ON LOAN); ILLINOIS BOARD OF HIGHER EDUCATION, 500 KEISER BLDG., 119 S. FIFTH STREET, SPRINGFIELD, ILLINOIS 62701 (NO PRICE QUOTED)

INSTITUTION NAME: ILLINOIS INST. FOR ENVIRONMENTAL QUALITY, CHICAGO.; ILLINOIS STATE BOARD OF HIGHER EDUCATION, SPRINGFIELD.

ACCESSION NUMBER: ED114334

CLEARINGHOUSE ACCESSION NUMBER: SO008713

PUBLICATION DATE: 74

TITLE: THE VICTOR-BOSTROM FUND REPORT: FOOD AND POPULATION. REPORT NO. 14, SUMMER-FALL 1974.

INSTITUTION CODE: BBB10178

DESCRIPTORS: DEMOGRAPHY; DEVELOPING NATIONS; ECOLOGICAL FACTORS; ECOLOGY; ENERGY; *ENVIRONMENTAL EDUCATION; FAMILY PLANNING; FOOD; HIGHER EDUCATION; *HUNGER; *NUTRITION; *POPULATION EDUCATION; POPULATION GROWTH; POPULATION TRENDS; *WORLD PROBLEMS

EDRS PRICE: EDRS PRICE MF-$0.76 HC-$1.95 PLUS POSTAGE

DESCRIPTIVE NOTE: 41P.

ISSUE: RIEMAR76

ABSTRACT: ELEVEN ARTICLES COMPRISE THIS DOCUMENT WHICH PRESENTS COMMENTARIES ON NUTRITION, POPULATION, AND ENVIRONMENTAL EDUCATION. THE ARTICLES DEAL SPECIFICALLY WITH THE CRISES OF A RAPIDLY GROWING WORLD POPULATION, A WORSENING WORLD FOOD SITUATION, AND AN ENERGY CRISIS. A NUMBER OF SPECIFIC RECOMMENDATIONS, BOTH NATIONAL AND INTERNATIONAL, ARE OFFERED TO IMPROVE THE PRECARIOUS WORLD-FOOD SITUATION. FOLLOWING AN INTRODUCTORY ARTICLE ON THESE PROBLEMS, THE SECOND ARTICLE CALLS FOR A GLOBAL EFFORT TO HELP SOLVE THE PROBLEMS THROUGH THE CONTINUED EFFORTS OF THE UNITED NATIONS GENERAL ASSEMBLY'S WORLD FOOD CONFERENCE. THE THIRD ARTICLE CALLS FOR A BUILDUP OF FOOD STOCKS TO GIVE THE WORLD A SECURITY AGAINST SERIOUS FOOD SHORTAGES THROUGH A COORDINATED SYSTEM OF NATIONAL RESERVE STOCKS OF CEREALS IN BOTH DEVELOPED AND DEVELOPING COUNTRIES. THE FOLLOWING ARTICLE CALLS ATTENTION TO THE PROBLEMS OF FOOD IN RELATION TO THE GROWING POPULATION--PROBLEMS OF BOTH QUANTITY AND DISTRIBUTION. ALSO INCLUDED IS A DECLARATION ON FOOD AND POPULATION PRESENTED TO THE UNITED NATIONS ON APRIL 25, 1974. THE PROBLEM OF THE WORLD FERTILIZER SHORTAGE WHICH THREATENS FOOD SUPPLIES IS DISCUSSED IN ANOTHER ARTICLE. OTHER ARTICLES DEAL WITH FOOD, NUTRITION, FAMILY HEALTH, AND FAMILY RESPONSIBILITIES. (AUTHOR/JR)

INSTITUTION NAME: VICTOR-BOSTROM FUND COMMITTEE, WASHINGTON, D.C.

ACCESSION NUMBER: ED114538

CLEARINGHOUSE ACCESSION NUMBER: CE005385

TITLE: THE DEMAND FOR SCIENTIFIC AND TECHNICAL MANPOWER IN SELECTED ENERGY-RELATED INDUSTRIES, 1970-85: A METHODOLOGY APPLIED TO A SELECTED SCENARIO OF ENERGY OUTPUT. A SUMMARY.

PERSONAL AUTHOR: GUTHANIS, IVARS; AND OTHERS

INSTITUTION CODE: PGK57190

DESCRIPTORS: DEMAND OCCUPATIONS; *EMPLOYMENT PROJECTIONS; EMPLOYMENT STATISTICS; EMPLOYMENT TRENDS; *ENERGY; ENERGY CONSERVATION; *ENGINEERS; *INDUSTRY; MANPOWER NEEDS; *SCIENTISTS; TABLES (DATA)

EDRS PRICE: EDRS PRICE MF-$0.76 HC-$1.95 PLUS POSTAGE

DESCRIPTIVE NOTE: 36P.

ISSUE: RIEAPR76

ABSTRACT: THE PRIMARY PURPOSE OF THE STUDY WAS TO DEVELOP AND APPLY A METHODOLOGY FOR ESTIMATING THE NEED FOR SCIENTISTS AND ENGINEERS BY SPECIALTY IN ENERGY AND ENERGY-RELATED INDUSTRIES. THE PROJECTIONS METHODOLOGY WAS BASED ON THE CASE 1 ESTIMATES BY THE NATIONAL PETROLEUM COUNCIL OF THE RESULTS OF "MAXIMUM EFFORTS" TO DEVELOP DOMESTIC FUEL SOURCES BY 1980 AND 1985. IT IS BASED ON SEVEN ENERGY-RELATED INDUSTRIES: ELECTRIC GENERATION; PETROLEUM AND NATURAL GAS EXTRACTION AND PETROLEUM REFINING; NATURAL GAS PRODUCTION, TRANSMISSION, AND DISTRIBUTION; COAL MINING; NUCLEAR POWER PRODUCTION AND RADIOACTIVE WASTE DISPOSAL; MANUFACTURE OF SELECTED PRODUCERS' DURABLE EQUIPMENT FOR ELECTRIC COMPANIES; AND ENERGY-RELATED CONSTRUCTION. EMPLOYMENT OF ENGINEERS AND SCIENTISTS IS EXPECTED TO INCREASE 117 PERCENT FROM 1970 TO 1985, WITH A MORE RAPID GROWTH OF DEMAND FOR ENGINEERS THAN FOR SCIENTISTS. PHYSICISTS, WITH AN INCREASE OF 186 PERCENT, AND CHEMISTS, WITH AN INCREASE OF 110 PERCENT, ARE EXPECTED TO COMPRISE ABOUT 61 PERCENT OF THE TOTAL DEMAND FOR SCIENTISTS. DEMANDS FOR GEOLOGISTS AND GEOPHYSICISTS WILL ALSO CONTINUE. THE PROJECTIONS INDICATE AN AVERAGE, ANNUAL ADDITIONAL REQUIREMENT OF ABOUT 11,200 ENGINEERS AND 4,300 SCIENTISTS BY 1985; THE FUTURE SUPPLY OF ENGINEERS AND SCIENTISTS MAY BE INADEQUATE TO MEET THE DEMANDS OF ENERGY/ENERGY-RELATED INDUSTRIES. (EA)

INSTITUTION NAME: NATIONAL PLANNING ASSOCIATION, WASHINGTON, D.C.

ACCESSION NUMBER: ED114920

CLEARINGHOUSE ACCESSION NUMBER: EA007641

PUBLICATION DATE: 75

TITLE: REMODELING, RENOVATION, & CONVERSION OF EDUCATIONAL FACILITIES.

INSTITUTION CODE: BBB07734

DESCRIPTORS: *BUILDING CONVERSION; *BUILDING IMPROVEMENT; COLLEGE PLANNING; COST EFFECTIVENESS; *ENERGY CONSERVATION; FACILITY CASE STUDIES; *FACILITY GUIDELINES; FACILITY REQUIREMENTS; FACILITY UTILIZATION RESEARCH; HIGHER EDUCATION; RESOURCE ALLOCATIONS; *SCHOOL IMPROVEMENT; SCHOOL MAINTENANCE; LIFE CYCLE COSTS

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS

DESCRIPTIVE NOTE: 171P.

ISSUE: RIEAPR76

ABSTRACT: BASED ON A SERIES OF WORKSHOPS, THIS COLLECTION OF PAPERS PROVIDES A FRAMEWORK FOR THOUGHT--EMPHASIZING PLANNING WITHIN TIME, FLEXIBILITY, AND MAINTENANCE CONSTRAINTS--AS WELL AS A PRACTICAL GUIDE FOR ACTUAL ENGINEERING OF REMODELING/RENOVATION/CONVERSION PROJECTS. IS REMODELING ALWAYS LESS EXPENSIVE THAN NEW CONSTRUCTION? SHOULD HIGH INITIAL COSTS BE AVOIDED BECAUSE LIFE-CYCLE COSTING IS IMPRACTICAL FOR REMODELING PROJECTS? AUTHORS ADDRESS THESE AND OTHER COST-RELATED SUBJECTS--REAL AND HIDDEN. REMODELING COSTS, COST DIFFERENCES BETWEEN NEW CONSTRUCTION AND REMODELING, AND COST ESTIMATION IN REMODELING AS WELL AS DISCUSSION OF IN-HOUSE VERSUS OUTSIDE CONTRACTING. TWO CHAPTERS ARE DEVOTED TO ENERGY CONSERVATION CONSIDERATIONS RELEVANT TO ANY CONSTRUCTION/REMODELING PROJECT. CASE STUDIES ARE USED THROUGHOUT TO EMPHASIZE PRACTICAL APPLICATIONS OF IDEAS WITH SPECIAL FOCUS TRAINED ON A RECENT, HIGHLY SUCCESSFUL FACILITIES CONSERVATION PROJECT AT SYRACUSE UNIVERSITY. (AUTHOR/MLF)

AVAILABILITY: ASSOCIATION OF PHYSICAL PLANT ADMINISTRATORS OF UNIVERSITIES AND COLLEGES, SUITE 525, ONE DUPONT CIRCLE, WASHINGTON, D.C. 20036 ($7.50)

INSTITUTION NAME: ASSOCIATION OF PHYSICAL PLANT ADMINISTRATORS OF UNIVERSITIES AND COLLEGES, WASHINGTON, D.C.

ACCESSION NUMBER: ED115478

CLEARINGHOUSE ACCESSION NUMBER: SE019377

PUBLICATION DATE: MAR 74

TITLE: NUCLEAR POWER AND THE ENVIRONMENT--QUESTIONS AND ANSWERS.

PERSONAL AUTHOR: CAMPANA, ROBERT J.; LANGER, SIDNEY

INSTITUTION CODE: BBB12484

DESCRIPTORS: BIBLIOGRAPHIES; ELECTRICITY; *ENERGY; *ENVIRONMENT; ENVIRONMENTAL INFLUENCES; *NUCLEAR PHYSICS; POLLUTION; PUBLIC HEALTH; *RADIATION; *SOCIAL PROBLEMS; UTILITIES; NUCLEAR ENERGY

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS

DESCRIPTIVE NOTE: 64P.; PRINTED IN BLUE INK

ISSUE: RIEAPR76

ABSTRACT: THIS BOOKLET HAS BEEN DEVELOPED TO HELP THE LAYMAN UNDERSTAND AND EVALUATE THE VARIOUS EFFORTS BEING UNDERTAKEN TO UTILIZE NUCLEAR POWER FOR THE BENEFIT OF MANKIND. THE QUESTION AND ANSWER FORMAT IS UTILIZED. AMONG THE TOPICS DISCUSSED ARE: OUR NEEDS FOR ELECTRICITY; SOURCES OF RADIATION; RADIATION FROM NUCLEAR POWER PLANTS; BIOLOGICAL EFFECTS OF RADIATION; THERMAL DISCHARGES; NUCLEAR LIABILITY AND INSURANCE; WASTE DISPOSAL; TRANSPORTATION IN THE NUCLEAR FUEL CYCLE; POWER PLANT SAFETY; NUCLEAR POWER PLANT SITING; NUCLEAR POWER: BENEFIT AND RISK; BREEDER REACTORS; THERMONUCLEAR FUSION; AND OTHER POSSIBLE POWER SOURCES. (BT)

AVAILABILITY: AMERICAN NUCLEAR SOCIETY, 244 EAST OGDEN AVENUE, HINSDALE, ILLINOIS 60521 (1-20 COPIES, $1.50 EA., 21-100 COPIES, $1.25 EA., DISCOUNTS ON LARGER QUANTITIES)

INSTITUTION NAME: AMERICAN NUCLEAR SOCIETY, HINSDALE, ILL.

ACCESSION NUMBER: ED115539

CLEARINGHOUSE ACCESSION NUMBER: SO008762

PUBLICATION DATE: MAY 75

TITLE: NEW PUBLICATIONS FOR PLANNING LIBRARIES (LIST NO. 2: ENVIRONMENT). EXCHANGE BIBLIOGRAPHY 790.

PERSONAL AUTHOR: VANCE, MARY, COMP.

INSTITUTION CODE: BBB03813

DESCRIPTORS: *BIBLIOGRAPHIES; CONSERVATION (ENVIRONMENT); ECOLOGY; ENERGY CONSERVATION; *ENVIRONMENT; ENVIRONMENTAL INFLUENCES; *ENVIRONMENTAL RESEARCH; LIBRARY ACQUISITIONS; *PHYSICAL ENVIRONMENT; POLLUTION

EDRS PRICE: EDRS PRICE MF-$0.76 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 22P.; FOR RELATED DOCUMENTS, SEE SO 008 761-780

ISSUE: RIEAPR76

ABSTRACT: OVER 100 LISTINGS COMPRISE THIS GENERAL BIBLIOGRAPHY ON ENVIRONMENTAL CONCERNS, POLLUTION, ENERGY, RESOURCES, NOISE POLLUTION, CONSERVATION, AND REPORTS OF ENVIRONMENTAL PROJECTS IN THE UNITED STATES AND OTHER COUNTRIES. LISTINGS PROVIDE CURRENT INFORMATION ON ENVIRONMENT. MOST DATE FROM 1974 TO 1975, ALTHOUGH A FEW 1973 SOURCES ARE LISTED. THE BULK OF THE DOCUMENTS ARE PROJECT REPORTS; BOOKS; BULLETINS; AND PAMPHLETS DEALING WITH ENVIRONMENTAL PROBLEMS. CITATIONS ARE ALPHABETIZED BY AUTHOR AND INCLUDE THE TITLE, DATE, NUMBER OF PAGES, AND AVAILABILITY. AN AUTHOR AND TITLE INDEX AND A LIST OF SOME PUBLISHERS' ADDRESSES CONCLUDE THE DOCUMENT. (JR)

AVAILABILITY: COUNCIL OF PLANNING LIBRARIANS, P.O. BOX 229, MONTICELLO, ILLINOIS 61856 ($2.00)

INSTITUTION NAME: COUNCIL OF PLANNING LIBRARIANS, MONTICELLO, ILL.

ACCESSION NUMBER: ED115541

CLEARINGHOUSE ACCESSION NUMBER: SO008764

PUBLICATION DATE: JUN 75

TITLE: NEW PUBLICATIONS FOR PLANNING LIBRARIES (LIST NO. 4). EXCHANGE BIBLIOGRAPHY 805.

PERSONAL AUTHOR: VANCE, MARY, COMP.

INSTITUTION CODE: BBB03813

DESCRIPTOR: *ARCHITECTURE; *BIBLIOGRAPHIES; *ECONOMICS; *ENERGY; ENVIRONMENTAL EDUCATION; LIBRARY ACQUISITION; SOCIAL SCIENCES; *URBAN STUDIES

EDRS PRICE: EDRS PRICE MF-$0.76 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 33P.; FOR RELATED DOCUMENTS, SEE SO 008 761-780

ISSUE: RIEAPR76

ABSTRACT: OVER 190 LISTINGS COMPRISE THIS GENERAL BIBLIOGRAPHY. THE BIBLIOGRAPHY PRESENTS SOURCES OF INFORMATION ON ARCHITECTURE AND DESIGN, ECONOMICS, ENERGY, LANDSCAPE AND LANDSCAPE ARCHITECTURE, AND URBAN CONCEPTS. LISTINGS PROVIDE CURRENT INFORMATION ON THESE TOPICS. MOST DATE FROM 1974 THROUGH 1975. THE BULK OF THE DOCUMENTS ARE PROJECT REPORTS; COMMERCIALLY PUBLISHED BOOKS, AND GOVERNMENT REPORTS AND BULLETINS. CITATIONS ARE ALPHABETIZED BY AUTHOR WITHIN EACH CATEGORY AND INCLUDE THE TITLE, DATE, NUMBER OF PAGES, AVAILABILITY, AND PRICE. AN AUTHOR AND TITLE INDEX AND A LIST OF SOME PUBLISHERS' ADDRESSES CONCLUDE THE DOCUMENT. (JR)

AVAILABILITY: COUNCIL OF PLANNING LIBRARIANS, P.O. BOX 229, MONTICELLO, ILLINOIS 61856 ($1.50)

INSTITUTION NAME: COUNCIL OF PLANNING LIBRARIANS, MONTICELLO, ILL.

ACCESSION NUMBER: ED115547

CLEARINGHOUSE ACCESSION NUMBER: SO008770

PUBLICATION DATE: JUL 75

TITLE: NEW PUBLICATIONS FOR PLANNING LIBRARIES (LIST NO. 16: THE ENVIRONMENT). EXCHANGE BIBLIOGRAPHY 829.

PERSONAL AUTHOR: VANCE, MARY, COMP.

INSTITUTION CODE: BBB03813

DESCRIPTOR: *BIBLIOGRAPHIES; ENERGY; *ENVIRONMENT; ENVIRONMENTAL CRITERIA; *ENVIRONMENTAL EDUCATION; *ENVIRONMENTAL RESEARCH; LIBRARY ACQUISITION; POLLUTION

EDRS PRICE: EDRS PRICE MF-$0.76 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 26P.; FOR RELATED DOCUMENTS, SEE SO 008 761-780

ISSUE: RIEAPR76

ABSTRACT: ONE HUNDRED AND TWENTY-NINE CITATIONS COMPRISE THIS GENERAL BIBLIOGRAPHY ON THE ENVIRONMENT. THE LISTINGS PROVIDE THE MOST CURRENT INFORMATION ON ENVIRONMENTAL STUDIES, RESEARCH, AND PROGRAMS (SEE ALSO SO 008 762). MOST DATE FROM 1974 THROUGH 1975. COMMERCIALLY PUBLISHED BOOKS AND GOVERNMENT AND STATE REPORTS MAKE UP THE BULK OF THE BIBLIOGRAPHIC ENTRIES. THE CITATIONS ARE ALPHABETIZED BY AUTHOR AND INCLUDE THE TITLE, DATE, NUMBER OF PAGES, AND AVAILABILITY. AN AUTHOR AND TITLE INDEX AND A LIST OF SOME PUBLISHERS' ADDRESSES CONCLUDE THE DOCUMENT. (JR)

AVAILABILITY: COUNCIL OF PLANNING LIBRARIANS, P.O. BOX 229, MONTICELLO, ILLINOIS 61856 ($1.50)

INSTITUTION NAME: COUNCIL OF PLANNING LIBRARIANS, MONTICELLO, ILL.

ACCESSION NUMBER: ED115551

CLEARINGHOUSE ACCESSION NUMBER: SO008774

PUBLICATION DATE: SEP 75

TITLE: NEW PUBLICATIONS FOR PLANNING LIBRARIES (LIST NO. 14: ENERGY AND ENVIRONMENT). EXCHANGE BIBLIOGRAPHY 867.

PERSONAL AUTHOR: VANCE, MARY, COMP.

INSTITUTION CODE: BBB03813

DESCRIPTOR: *BIBLIOGRAPHIES; ECOLOGY; *ENERGY; *ENVIRONMENTAL EDUCATION; ENVIRONMENTAL INFLUENCES; LIBRARY ACQUISITION

EDRS PRICE: EDRS PRICE MF-$0.76 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 43P.; FOR RELATED DOCUMENTS, SEE SO 008 761-780

ISSUE: RIEAPR76

ABSTRACT: PRESENTED IN THIS 41-PAGE BIBLIOGRAPHY ARE LISTINGS ON ENVIRONMENTAL CONCERNS, POLLUTION, ENERGY, AND ENVIRONMENTAL EDUCATION (SEE ALSO SO 008 762). THE LISTINGS PROVIDE THE MOST CURRENT INFORMATION ON ENERGY AND ENVIRONMENT DATING FROM 1973 THROUGH 1975. THE BULK OF THE DOCUMENTS ARE CONFERENCE PROCEEDINGS, PROJECT REPORTS, STUDIES, AND COMMERCIALLY PUBLISHED BOOKS. CITATIONS ARE ALPHABETIZED BY AUTHOR AND INCLUDE THE TITLE, DATE, NUMBER OF PAGES, AND AVAILABILITY. (JR)

AVAILABILITY: COUNCIL OF PLANNING LIBRARIANS, P.O. BOX 229, MONTICELLO, ILLINOIS 61856 ($4.00)

INSTITUTION NAME: COUNCIL OF PLANNING LIBRARIANS, MONTICELLO, ILL.

ACCESSION NUMBER: ED115556

CLEARINGHOUSE ACCESSION NUMBER: SO008779

PUBLICATION DATE: NOV 75

TITLE: NEW PUBLICATIONS FOR PLANNING LIBRARIES (LIST NO. 19). EXCHANGE BIBLIOGRAPHY 927.

PERSONAL AUTHOR: VANCE, MARY, COMP.

INSTITUTION CODE: BBB03813

DESCRIPTOR: *ARCHITECTURE; *BIBLIOGRAPHIES; CITY PLANNING; *ECONOMICS; ENERGY; *ENVIRONMENTAL EDUCATION; GEOGRAPHY; LAND USE; LIBRARY ACQUISITION; POLITICS; RECREATION

EDRS PRICE: EDRS PRICE MF-$0.76 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 65P.; FOR RELATED DOCUMENTS, SEE SO 008 761-780

ISSUE: RIEAPR76

ABSTRACT: THIS PARTIALLY ANNOTATED BIBLIOGRAPHY CONTAINS CURRENT SOURCES ON A VARIETY OF TOPICS INCLUDING ARCHITECTURE, ECONOMICS, ENVIRONMENTAL EDUCATION, ENERGY, GEOGRAPHY, LAND USE, URBAN PLANNING, POLITICS, RECREATION, AND OPEN SPACE. THE SOURCES DATE FROM 1973 THROUGH 1975. THE BULK OF THE DOCUMENTS ARE PROJECT REPORTS, COMMERCIALLY PUBLISHED BOOKS, STUDIES, AND BULLETINS. CITATIONS ARE ALPHABETIZED BY AUTHOR WITHIN EACH TOPIC AND INCLUDE THE TITLE, DATE, NUMBER OF PAGES, AND AVAILABILITY. (JR)

AVAILABILITY: COUNCIL OF PLANNING LIBRARIANS, P.O. BOX 229, MONTICELLO, ILLINOIS 61856 ($6.00)

INSTITUTION NAME: COUNCIL OF PLANNING LIBRARIANS, MONTICELLO, ILL.

ACCESSION NUMBER: ED115557

CLEARINGHOUSE ACCESSION NUMBER: SO008780

PUBLICATION DATE: DEC 75

TITLE: NEW PUBLICATIONS FOR PLANNING LIBRARIES (LIST NO. 20). EXCHANGE BIBLIOGRAPHY 928.

PERSONAL AUTHOR: VANCE, MARY, COMP.

INSTITUTION CODE: BBB03813

DESCRIPTOR: *ARCHITECTURE; *BIBLIOGRAPHIES; CITY PLANNING; *ECONOMICS; *ENERGY; *ENVIRONMENTAL EDUCATION; GEOGRAPHY; HOUSING; LAND USE; LIBRARY ACQUISITION; POLITICS; RECREATION; TRANSPORTATION

EDRS PRICE: EDRS PRICE MF-$0.76 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 70P.; FOR RELATED DOCUMENTS, SEE SO 008 761-779

ISSUE: RIEAPR76

ABSTRACT: THIS PARTIALLY ANNOTATED BIBLIOGRAPHY CONTAINS CURRENT LISTINGS ON A VARIETY OF TOPICS INCLUDING ARCHITECTURE, ECONOMICS, ENERGY, ENVIRONMENTAL EDUCATION, GEOGRAPHY, HOUSING, LAND USE, POLITICS, URBAN PLANNING, RECREATION, AND TRANSPORTATION. THE BULK OF THE DOCUMENTS ARE PROJECT REPORTS, COMMERCIALLY PUBLISHED BOOKS, AND STUDIES. MOST DATE FROM 1973 THROUGH 1975. CITATIONS ARE ALPHABETIZED BY AUTHOR WITHIN EACH TOPIC AND INCLUDE THE TITLE, DATE, NUMBER OF PAGES, AND AVAILABILITY. (JR)

AVAILABILITY: COUNCIL OF PLANNING LIBRARIANS, P.O. BOX 229, MONTICELLO, ILLINOIS 61856 ($7.00)

INSTITUTION NAME: COUNCIL OF PLANNING LIBRARIANS, MONTICELLO, ILL.

ACCESSION NUMBER: ED115857

CLEARINGHOUSE ACCESSION NUMBER: CE005695

PUBLICATION DATE: SEP 75

TITLE: GMIS GENERALIZED MANAGEMENT INFORMATION SYSTEM : AN EXPERIMENTAL SYSTEM FOR DATA MANAGEMENT AND ANALYSIS.

PERSONAL AUTHOR: DONOVAN, JOHN J.; JACOBY, HENRY D.

INSTITUTION CODE: BBB12649

SPONSORING AGENCY CODE: BBB06953; BBB12650

DESCRIPTOR: *COMPUTER PROGRAMS; *COMPUTER SCIENCE; *ELECTRONIC DATA PROCESSING; *ENERGY; *MANAGEMENT INFORMATION SYSTEMS; PROGRAMING; GENERALIZED MANAGEMENT INFORMATION SYSTEMS; GMIS

EDRS PRICE: EDRS PRICE MF-$0.76 HC-$3.32 PLUS POSTAGE

DESCRIPTIVE NOTE: 69P.; FOR RELATED DOCUMENTS, SEE ED 062 553; ED 068 646-647; ED 072 225; ED 072 228; ED 072 303-304; CE 005 687-727; REPORT OF WORK CARRIED OUT IN ASSOCIATION WITH THE ALFRED P. SLOAN SCHOOL OF MANAGEMENT AND IBM

ISSUE: RIEMAY76

ABSTRACT: THE REPORT PRESENTS THE UNDERLYING SOFTWARE ARCHITECTURE AND RATIONALE OF THE GENERALIZED MANAGEMENT INFORMATION SYSTEM (GMIS), ALONG WITH A SAMPLE DEMONSTRATION (AN ENERGY ANALYSIS PROBLEM) OF ITS CHARACTERISTICS AND A SUMMARY OF TOPICS OF CONTINUING RESEARCH. THE FIELD-TESTED EXPERIMENTAL SYSTEM HAS THE FOLLOWING FEATURES: IT ALLOWS ON-LINE INTERACTIVE DATA MANAGEMENT AS WELL AS A BATCH FACILITY; ALLOWS FOR STORGAGE OF LARGE QUANTITIES OF VARIOUS TYPES OF DATA; AND ALLOWS THE CHANGING OF DATA, ADDITION OF NEW DATA SERIES, AND MODIFICATION OF TABLES. IT GIVES THE USER A SIMPLE AND CONSISTENT VIEW OF THE WAY DATA IS STORED IN THE SYSTEM, PERMITS SEVERAL USERS TO SELECT AND ACCESS DATA ACCORDING TO MANY CRITERIA, ALLOWS FOR EASY VIEWING OF DATA, AND CONTAINS FACILITIES FOR VALIDATION OF DATA. THE SYSTEM PROVIDES FACILITIES TO INTERACTIVELY CHANGE DATA PROTECTION, IS ABLE TO STORE DATA ABOUT DATA, PROVIDES A MECHANISM FOR ASSURING THE INTEGRITY OF THE DATA, AND PROVIDES MECHANISMS FOR MONITORING AND TUNING PERFORMANCE. THE SYSTEM PROVIDES THE USER WITH AN EFFICIENT, FLEXIBLE ENVIRONMENT TO SPECIFY, CONSTRUCT, AND EXECUTE STATISTICAL ANALYSES AND MODEL STUDIES, AND TO PRODUCE THE ASSOCIATED PLOTS AND REPORTS. (GMIS IS BEING EXERCISED FOR MISOE APPLICATION.) (AUTHOR/AJ)

REPORT NUMBER: MIT-EL-75-011WP

INSTITUTION NAME: MASSACHUSETTS INST. OF TECH., CAMBRIDGE. ENERGY LAB.

SPONSORING AGENCY NAME: FEDERAL ENERGY ADMINISTRATION, WASHINGTON, D.C.; NEW ENGLAND REGIONAL COMMISSION.

ACCESSION NUMBER: ED116331

CLEARINGHOUSE ACCESSION NUMBER: EA007813

PUBLICATION DATE: DEC 75

TITLE: NEW AND EMERGING PROBLEMS IN SCHOOL ADMINSTRATION.

PERSONAL AUTHOR: TENHAKEN, RICHARD E.

INSTITUTION CODE: QPX02801

DESCRIPTOR: *BOARD OF EDUCATION ROLE; *CHANGE STRATEGIES; COMMUNICATION SKILLS; CONFLICT RESOLUTION; *EDUCATIONAL ADMINISTRATION; EDUCATIONAL ATTITUDES; EDUCATIONAL ECONOMICS; *EDUCATIONAL FINANCE; ELEMENTARY SECONDARY EDUCATION; ENERGY CONSERVATION; ENROLLMENT TRENDS; GOVERNMENT ROLE; *GUIDELINES; NONDISCRIMINATORY EDUCATION

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS

DESCRIPTIVE NOTE: 29P.; CHAPTER 2 OF PERSONNEL MANAGEMENT INSTITUTES, 1975, EA 007 811

ISSUE: RIEMAY76

ABSTRACT: THIS PAPER EXAMINES A NUMBER OF PROBLEMS FACING SCHOOL BOARD MEMBERS AND EDUCATIONAL ADMINISTRATORS TODAY AND SUGGESTS SOME POSSIBLE APPROACHES TO ADDRESSING THOSE PROBLEMS EFFECTIVELY. IN CONSIDERING EACH PROBLEM AREA, THE AUTHOR EMPHASIZES ITS IMPACT ON THE ACTIVITIES AND RESPONSIBILITIES OF SCHOOL OFFICIALS AND DISCUSSES CONCRETE STEPS THEY CAN TAKE IN RESPONSE. NINE SPECIFIC PROBLEMS ARE DISCUSSED, INCLUDING THE IMPACT OF DECLINING SCHOOL ENROLLMENTS, THE REPERCUSSIONS OF FEDERAL REQUIREMENTS BANNING SEX DISCRIMINATION IN EDUCATION, CONFLICT BETWEEN SCHOOL BOARD MEMBERS AND ADMINISTRATORS AND TEACHERS, FINANCIAL PROBLEMS, ENERGY PROBLEMS, INCREASING GOVERNMENT INVOLVEMENT IN SCHOOL DECISION-MAKING, THE IMPACT OF A CHANGING ECONOMY AND JOB MARKET ON EDUCATION, CHANGING PUBLIC ATTITUDES TOWARD SCHOOLS, AND LACK OF EFFECTIVE COMMUNICATION BETWEEN SCHOOL PERSONNEL, STUDENTS, AND THE PUBLIC. (JG)

AVAILABILITY: NOT AVAILABLE SEPARATELY; SEE EA 007 811

INSTITUTION NAME: NEW YORK STATE SCHOOL BOARDS ASSOCIATION, ALBANY.

ACCESSION NUMBER: ED116878

CLEARINGHOUSE ACCESSION NUMBER: RC008950

PUBLICATION DATE: MAY 73

TITLE: THE 1972-73 NEW RURAL SOCIETY PROJECT.

INSTITUTION CODE: BBB00306

SPONSORING AGENCY CODE: BBB60129

DESCRIPTOR: ANNUAL REPORTS; *BUSINESS; *COMMUNITY SERVICES; EDUCATION; ENERGY CONSERVATION; FIELD STUDIES; HEALTH; INSTITUTIONS; LIVING STANDARDS; LOCAL GOVERNMENT; *PILOT PROJECTS; POPULATION DISTRIBUTION; PROGRAM DESCRIPTIONS; *RURAL DEVELOPMENT; TECHNOLOGY; *TELECOMMUNICATION; CONNECTICUT (NORTHEAST); NEW RURAL SOCIETY CONCEPT; *QUALITY OF LIFE

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS

DESCRIPTIVE NOTE: 159P.

ISSUE: RIEMAY76

ABSTRACT: THE NEW RURAL SOCIETY CONCEPT, WHICH URGES ESTABLISHMENT OF A MORE BALANCED RURAL-URBAN POPULATION DISTRIBUTION IN RESPONSE TO THE INTERDEPENDENT RURAL-URBAN ENERGY CRISIS, IS EXPLICATED IN THIS REPORT ON A MODEL PROJECT INITIATED IN 1972 IN 10 NORTHEASTERN CONNECTICUT TOWNSHIPS. THE FOLLOWING ARE CITED AS MAJOR PROJECT OBJECTIVES: (1) TO OBTAIN INFORMATION AND EXPERIENCE IN THE APPLICATION OF COMMUNICATIONS TECHNOLOGY FOR THE DEVELOPMENT OF RURAL AREAS; AND (2) TO DEVELOP A MODEL OF ORGANIZATIONAL PROCEDURE THAT WOULD BE TRANSFERABLE TO OTHER RURAL AREAS. ORGANIZED VIA THREE MAJOR PROJECT TASKS, THIS REPORT DETAILS: (1) REGIONAL COMMUNITY DEVELOPMENT TASK; (2) INSTITUTIONAL DEVELOPMENT TASK (BUSINESS AND GOVERNMENT); AND (3) EXPERIMENTAL COMMUNICATIONS TASK (LAB EXPERIMENTS AND FIELD TESTS), FOCUSING ON THE MEANS TO IMPROVE RURAL QUALITY OF LIFE IN THE AREAS OF HEALTH, EDUCATION, ENTERTAINMENT, CULTURE, AND COMMUNITY EXPRESSION VIA USE OF EXISTING COMMUNICATIONS TECHNOLOGY IN THE TEST AREA, THIS REPORT INDICATES: (1) USE OF COMMUNICATION TECHNIQUES CAN IMPROVE RURAL QUALITY OF LIFE; (2) URBAN OFFICE RELOCATION IN CONJUNCTION WITH TELECONFERENCING CAN FACILITATE THE LOCATION OF BUSINESS AND GOVERNMENT COMPONENTS IN RURAL TOWNS; (3) AUDIO-ONLY TELECONFERENCING CAN BE MORE EFFECTIVE AS A SUBSTITUTE FOR FACE-TO-FACE MEETINGS THAN HAS BEEN PREVIOUSLY THOUGHT. (NTIS/JC)

REPORT NUMBER: PB-231-826

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VIRGINIA 22161 (PB-231-826, MF $2.25, HC $6.25)

INSTITUTION NAME: FAIRFIELD UNIV., CONN.

SPONSORING AGENCY NAME: DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT, WASHINGTON, D.C.

ACCESSION NUMBER: ED116900

CLEARINGHOUSE ACCESSION NUMBER: SE018505

PUBLICATION DATE: MAY 74

TITLE: FUTURE ENVIRONMENT OF MINNESOTA: THE EDUCATIONAL TASK. CONFERENCE PROCEEDINGS (ONAMIA, MINNESOTA, MAY 12-14, 1974).

INSTITUTION CODE: BBB12624

SPONSORING AGENCY CODE: BBB12625

DESCRIPTOR: *CONFERENCE REPORTS; ECONOMIC DEVELOPMENT; ENERGY CONSERVATION; *ENVIRONMENTAL EDUCATION; NATURAL RESOURCES; STATE GOVERNMENT; TRANSPORTATION; *MINNESOTA

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS

DESCRIPTIVE NOTE: 132P.; MARGINAL LEGIBILITY THROUGHOUT ENTIRE DOCUMENT DUE TO COLORED PAGES

ISSUE: RIEMAY76

ABSTRACT: THIS BOOKLET IS A COMPILATION OF REPORT PROCEEDINGS OF THE INDUSTRY-EDUCATION CONFERENCE OF THE MINNESOTA ACADEMY OF SCIENCE. IT WAS DESIGNED AS AN ORIENTATION BOOKLET FOR PARTICIPANTS IN THIS CONFERENCE AND INCLUDES THE TEXT OF THE SPEECHES GIVEN BY A NUMBER OF KEYNOTE SPEAKERS. THE THEME OF THE CONFERENCE WAS TOTAL ENVIRONMENTAL IMPACT, WITH A SPECIAL EMPHASIS ON FUTURE PROJECTIONS. DISCUSSIONS CONCERNING EDUCATION, ENERGY, GOVERNMENT, ECONOMICS, NATURAL RESOURCES, AND TRANSPORTATION ISSUES IN MINNESOTA, FROM THE PRESENT TO 1985, WERE INCLUDED. OBJECTIVES OF THE CONFERENCE WERE TO ANALYZE PRESENT ENVIRONMENTAL CONDITIONS AND TO DEVELOP A SYSTEM OF ALTERNATIVE PLANS TO ENCOURAGE ENVIRONMENTAL QUALITY. INVOLVEMENT OF THE STATE EDUCATION SYSTEM TO DISSEMINATE THIS INFORMATION WAS INCLUDED. (MA)

AVAILABILITY: ERIC/SMEAC, THE OHIO STATE UNIVERSITY, 1200 CHAMBERS ROAD, 3RD FLOOR, COLUMBUS, OHIO 43212 (ON LOAN)

INSTITUTION NAME: MINNESOTA ACADEMY OF SCIENCE, MINNEAPOLIS.

SPONSORING AGENCY NAME: SCIENCE MUSEUM OF MINNESOTA, ST. PAUL.

ACCESSION NUMBER: ED116920

CLEARINGHOUSE ACCESSION NUMBER: SE019886

PUBLICATION DATE: NOV 73

TITLE: ENERGY FACTS; SUBCOMMITTEE ON ENERGY OF THE COMMITTEE ON SCIENCE AND ASTRONAUTICS, HOUSE OF REPRESENTATIVES, NINETY-THIRD CONGRESS, FIRST SESSION COMMITTEE PRINT.

INSTITUTION CODE: BBB05642

DESCRIPTOR: *ENERGY; *ENVIRONMENT; INDUSTRY; *NATURAL RESOURCES; *REPORTS; *STATISTICAL DATA; ENERGY USE; UNITED STATES

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS

DESCRIPTIVE NOTE: 339P.; CONTAINS TYPE TOO SMALL FOR ADEQUATE REPRODUCTION

ISSUE: RIEMAY76

ABSTRACT: THIS HANDBOOK CONTAINS A COMPREHENSIVE SELECTION OF UNITED STATES AND FOREIGN ENERGY STATISTICS IN THE FORM OF GRAPHS AND TABLES. THE DATA ARE CLASSIFIED ACCORDING TO RESOURCES, PRODUCTION, CONSUMPTION AND DEMAND, ENERGY AND GROSS NATIONAL PRODUCT, AND RESEARCH AND DEVELOPMENT. STATISTICS ON ENERGY SOURCES SUCH AS COAL, OIL, GAS, NUCLEAR ENERGY, URANIUM, AND SOLAR ENERGY ARE PROVIDED. THE REPORT ALSO INCLUDES A LIST OF SOURCES FOR MORE COMPLETE INFORMATION, A GLOSSARY OF ENERGY-RELATED TERMS, A LIST OF ABBREVIATIONS, AND CONVERSION FACTORS. (MR)

AVAILABILITY: SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON, D.C. 20402 (STOCK NUMBER 052-070-02160-8, $4.65); ERIC/SMEAC, THE OHIO STATE UNIVERSITY, 1200 CHAMBERS ROAD, 3RD FLOOR, COLUMBUS, OHIO 43212 (ON LOAN)

INSTITUTION NAME: LIBRARY OF CONGRESS, WASHINGTON, D.C. CONGRESSIONAL RESEARCH SERVICE.

ACCESSION NUMBER: ED116921

CLEARINGHOUSE ACCESSION NUMBER: SE019905

PUBLICATION DATE: DEC 74

TITLE: ENVIRONMENTAL QUALITY. THE FIFTH ANNUAL REPORT OF THE COUNCIL ON ENVIRONMENTAL QUALITY.

INSTITUTION CODE: BBB05544

DESCRIPTOR: ANNUAL REPORTS; ECONOMICS; ENERGY; *ENVIRONMENT; *FEDERAL GOVERNMENT; FEDERAL LEGISLATION; LAND USE; *NATURAL RESOURCES; *POLLUTION; *QUALITY CONTROL; *COUNCIL ON ENVIRONMENTAL QUALITY

EDRS PRICE: EDRS PRICE MF-$1.08 HC-$32.37 PLUS POSTAGE

DESCRIPTIVE NOTE: 627P.; OCCASIONAL SMALL PRINT

ISSUE: RIEMAY76

ABSTRACT: THIS FIFTH ANNUAL REPORT DISCUSSES THE STATE OF THE ENVIRONMENT AND EFFORTS TO IMPROVE IT. THE FIRST CHAPTER PRESENTS AN OVERVIEW OF LAND USE: THE EFFECTS OF DEVELOPMENT ON ENVIRONMENTAL, ECONOMIC, AND SOCIAL FACTORS; THE STIMULANTS OF DEVELOPMENT SUCH AS FEDERAL TAXES, FUNDING OF PUBLIC FACILITIES, AND ENERGY-RELATED DECISIONS; AND LAND USE CONTROLS EMPLOYED BY STATE AND REGIONAL GOVERNMENTS. THE SECOND CHAPTER DEALS WITH GOVERNMENT PROGRAMS IN ENERGY, AIR AND WATER QUALITY, SOLID WASTE DISPOSAL, NOISE, MAN-MADE POLLUTANTS, AND WILDLIFE AND HABITAT PROTECTION. THE CONDITION OF THE ENVIRONMENT AND TRENDS IN ENVIRONMENTAL QUALITY ARE EXPLORED IN THE THIRD CHAPTER. THE FOURTH CHAPTER REVIEWS THE EFFECTS OF THE NATIONAL ENVIRONMENTAL POLICY ACT EMPHASIZING THE STRUCTURE OF THE ENVIRONMENTAL IMPACT STATEMENT PROCESS. INTERNATIONAL ENVIRONMENTAL ACTIVITIES ARE REPORTED IN THE FIFTH CHAPTER. THE UNITED NATIONS ENVIRONMENTAL PROGRAM AND OTHER BILATERAL OR MULTILATERAL PROGRAMS ARE DISCUSSED. THE FINAL CHAPTER DESCRIBES THE WORK OF THE COUNCIL OF ENVIRONMENTAL QUALITY OVER THE PAST YEAR. PROJECTS LISTED INCLUDE OFFSHORE NUCLEAR POWER PLANTS, WASTEWATER TREATMENT, PESTICIDES, AND FUEL ECONOMY. (MR)

AVAILABILITY: SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON, D.C. 20402 (STOCK NO. 4000-00327, $5.20)

INSTITUTION NAME: COUNCIL ON ENVIRONMENTAL QUALITY, WASHINGTON, D.C.

ACCESSION NUMBER: ED116952

CLEARINGHOUSE ACCESSION NUMBER: SE020187

PUBLICATION DATE: JUN 75

TITLE: ENERGY: EDUCATION AND INDUSTRY CHANGES FOR A NEW ERA UTILIZATION SYSTEM MODIFICATIONS.

PERSONAL AUTHOR: DILLE, EARL K.; UREIFKE, GERALD E.

DESCRIPTOR: COLLEGE SCIENCE; *CURRICULUM DEVELOPMENT; ENERGY; *ENGINEERING EDUCATION; ENVIRONMENTAL EDUCATION; FUELS; HIGHER EDUCATION; *MANPOWER NEEDS; SCIENCE EDUCATION; *SCIENTIFIC RESEARCH; *UTILITIES

EDRS PRICE: EDRS PRICE MF-$0.76 HC-$1.95 PLUS POSTAGE

DESCRIPTIVE NOTE: 31P.; PAPER PRESENTED AT THE ANNUAL MEETING OF THE AMERICAN SOCIETY FOR ENGINEERING EDUCATION (COLORADO STATE UNIVERSITY, FT. COLLINS, COLORADO, JUNE 16-19, 1975)

ISSUE: RIEMAY76

ABSTRACT: THIS PAPER PROVIDES DATA AND OPINIONS ON LONG- AND SHORT-TERM CHALLENGES AND CHANGES REQUIRED TO MEET THE HUMAN RESOURCE AND EDUCATIONAL NEEDS IN A NUCLEAR ELECTRIC ERA AS SEEN FROM A UTILITY COMPANY'S POINT OF VIEW. IN PARTICULAR, STATEMENTS ON ENGINEERING EDUCATION CURRICULUM, STATISTICS ON CERTAIN FUTURE MANPOWER REQUIREMENTS, ELECTRIC UTILITY PROBLEMS AND NEEDS, AND A RESEARCH AND DEVELOPMENT PROGRAM SUPPORTED BY UTILITY COMPANIES AND DIRECTED AT IMPORTANT ENERGY PROBLEMS ARE DETAILED. (CP)

ACCESSION NUMBER: ED116979

CLEARINGHOUSE ACCESSION NUMBER: SO008733

PUBLICATION DATE: JUN 74

TITLE: ENVIRONMENTAL POLICY, LAW, AND ADMINISTRATION: A GUIDE TO ADVANCED STUDY.

PERSONAL AUTHOR: CALDWELL, LYNTON K.; SIDDIUI, TOUFIQ A.

INSTITUTION CODE: BB812705

SPONSORING AGENCY CODE: FGK57295

DESCRIPTOR: ADMINISTRATIVE POLICY; BIBLIOGRAPHIES; *CONSERVATION (ENVIRONMENT); ECOLOGY; ENERGY; *ENVIRONMENT; ENVIRONMENTAL CRITERIA; ENVIRONMENTAL EDUCATION; *ENVIRONMENTAL INFLUENCES; ENVIRONMENTAL RESEARCH; HIGHER EDUCATION; INTERDISCIPLINARY APPROACH; LAWS; *LEGAL PROBLEMS; *PUBLIC POLICY; RESOURCE GUIDES; SOCIAL SCIENCES

EDRS PRICE: EDRS PRICE MF-$1.08 HC-$29.83 PLUS POSTAGE

DESCRIPTIVE NOTE: 591P.

ISSUE: RIEMAY76

ABSTRACT: THIS GUIDE IS INTENDED TO ASSIST THE ORGANIZATION OF STUDIES DEALING WITH THE BEHAVIOR OF HUMAN SOCIETIES AND THEIR INSTITUTIONS IN RELATION TO THEIR ENVIRONMENTS. EMPHASIS IS ON CONTEMPORARY INDUSTRIAL AND POSTINDUSTRIAL SOCIETY AS IT EXPRESSES ITS ENVIRONMENTAL RELATIONSHIPS THROUGH ACTION DEFINED BY POLICIES, LAWS, AND ADMINISTRATIVE ARRANGEMENTS. THE CONTENT AND ORGANIZATION IS ESSENTIALLY MULTIDISCIPLINARY. TWELVE SUBTOPICS ARE ORGANIZED AROUND THE FOLLOWING FOUR MAJOR AREAS: (1) BASIC ENVIRONMENTAL CONCEPTS--INTRODUCTION AND BACKGROUND; (2) ENVIRONMENT AS A POLICY ISSUE--ORIGINS, CHARACTERISTICS, AND IMPLICATIONS; (3) RECONCILING NATURAL AND TECHNICAL SYSTEMS--OBJECTIVES, APPROACHES, AND PROCESSES; AND (4) PROBLEMS OF POLICY IMPLEMENTATION--ECONOMIC, JURIDICAL, AND INSTITUTIONAL. EACH OF THE SUBTOPICS IS KEYED TO REFERENCES IN THE COMPREHENSIVE BIBLIOGRAPHIES. SUBTOPICS ARE DEFINED AND DESCRIBED BY AN ABSTRACT. BIBLIOGRAPHIC REFERENCES TO ARTICLES AND BOOKS COMPRISE THE BULK OF THE DOCUMENT. FOR EACH TOPIC, A SET OF 10 ORGANIZING QUESTIONS HAS BEEN PROVIDED TO ENABLE THE STUDENT TO ESTIMATE HIS COMPREHENSION OF THE SUBJECT. (AUTHOR/JR)

AVAILABILITY: LYNTON K. CALDWELL, DEPARTMENT OF POLITICAL SCIENCE, WOODBURN HALL 213, INDIANA UNIVERSITY, BLOOMINGTON, INDIANA 47401 ($7.00)

INSTITUTION NAME: INDIANA UNIV., BLOOMINGTON. SCHOOL OF PUBLIC AND ENVIRONMENTAL AFFAIRS.

SPONSORING AGENCY NAME: NATIONAL SCIENCE FOUNDATION, WASHINGTON, D.C.

ACCESSION NUMBER: ED117010

CLEARINGHOUSE ACCESSION NUMBER: SO008844

PUBLICATION DATE: 75

TITLE: FOOD PRODUCTION, POPULATION GROWTH, AND ENVIRONMENTAL QUALITY. CALTECH POPULATION PROGRAM OCCASIONAL PAPERS, SERIES 1, NUMBER 7.

PERSONAL AUTHOR: GROTH, EDWARD, III

INSTITUTION CODE: CIQ10575

DESCRIPTOR: CONSERVATION (ENVIRONMENT); *ECOLOGICAL FACTORS; ENERGY; *ENVIRONMENTAL INFLUENCES; FERTILIZERS; *FOOD; LAND USE; NATURAL RESOURCES; PESTICIDES; *POPULATION GROWTH; POPULATION TRENDS; *SOCIAL SCIENCES; SOIL CONSERVATION; WATER RESOURCES; WORLD PROBLEMS

EDRS PRICE: EDRS PRICE MF-$0.76 HC-$1.95 PLUS POSTAGE

DESCRIPTIVE NOTE: 27P.; FOR RELATED DOCUMENTS, SEE SO 008 842-846

ISSUE: RIEMAY76

ABSTRACT: THIS PAPER, ONE IN A SERIES OF OCCASIONAL PUBLICATIONS, DISCUSSES TRENDS IN FOOD PRODUCTION AND POPULATION GROWTH, EMPHASIZING HOW ENVIRONMENTAL QUALITY WILL BE AFFECTED. THE SERIES IS INTENDED TO INCREASE UNDERSTANDING OF THE INTERRELATIONSHIPS BETWEEN POPULATION GROWTH AND SOCIOECONOMIC AND CULTURAL PATTERNS THROUGHOUT THE WORLD, AND TO COMMUNICATE THIS UNDERSTANDING TO SCHOLARS AND POLICY MAKERS. THIS PUBLICATION INCLUDES A DISCUSSION OF THE FOLLOWING: (1) LAND RESOURCES AND PRODUCTIVE CAPACITY; (2) WATER RESOURCES AND WATER QUALITY; (3) ENERGY AND FOOD PRODUCTION; (4) FERTILIZERS AND SOIL NUTRIENTS; (5) PEST MANAGEMENT; (6) ORGANIC RESIDUES FROM AGRICULTURE AND FOOD PROCESSING; (7) THREATS TO ECOLOGICAL STABILITY; (8) TRADE-OFFS: ENVIRONMENTAL QUALITY, FOOD PRODUCTION, AND COSTS; AND (9) THE ROLE OF POPULATION GROWTH. (AUTHOR/RM)

INSTITUTION NAME: CALIFORNIA INST. OF TECH., PASADENA.

ACCESSION NUMBER: ED117012

CLEARINGHOUSE ACCESSION NUMBER: SO008846

PUBLICATION DATE: 75

TITLE: POPULATION GROWTH AND AFFLUENCE: THE FISSIONING OF HUMAN SOCIETY. CALTECH POPULATION PROGRAM OCCASIONAL PAPERS, SERIES 1, NUMBER 9.

PERSONAL AUTHOR: BROWN, HARRISON

INSTITUTION CODE: CIQ10575

DESCRIPTOR: COMPARATIVE ANALYSIS; *DEVELOPED NATIONS; *DEVELOPING NATIONS; ENERGY; GRAPHS; INCOME; *POPULATION GROWTH; *SOCIAL SCIENCES

EDRS PRICE: EDRS PRICE MF-$0.76 HC-$1.58 PLUS POSTAGE

DESCRIPTIVE NOTE: 23P.; FOR RELATED DOCUMENTS, SEE SO 008 842-845

ISSUE: RIEMAY76

ABSTRACT: THIS PAPER COMPARES POPULATION GROWTH AND AFFLUENCE IN DEVELOPED NATIONS IN WHICH PER CAPITA INCOME AND CONSUMPTION HAVE BEEN RELATIVELY HIGH, AND IN DEVELOPING NATIONS IN WHICH PER CAPITA INCOME AND CONSUMPTION HAVE BEEN RELATIVELY LOW. THE PAPER IS ONE IN A SERIES OF OCCASIONAL PUBLICATIONS INTENDED TO INCREASE UNDERSTANDING OF THE INTERRELATIONSHIPS BETWEEN POPULATION GROWTH AND SOCIOECONOMIC AND CULTURAL PATTERNS THROUGHOUT THE WORLD, AND TO COMMUNICATE THIS UNDERSTANDING TO SCHOLARS AND POLICY MAKERS. IN THIS PUBLICATION, THE AUTHOR USES THE CONSUMPTION OF ENERGY AND STEEL BETWEEN 1950 AND 1970 AS PRIMARY INDICATORS BECAUSE OF THE OBVIOUS IMPLICATIONS OF THE GROWTH OF SUCH PARAMETERS UPON THE ENVIRONMENT AND THE WORLD RESOURCE BASE. GRAPHS AND TABLES ARE PROVIDED. (AUTHOR/RM)

INSTITUTION NAME: CALIFORNIA INST. OF TECH., PASADENA.

ACCESSION NUMBER: ED117023

CLEARINGHOUSE ACCESSION NUMBER: SO008864

PUBLICATION DATE: 75

TITLE: THE MARKET SYSTEM: DOES IT WORK?

PERSONAL AUTHOR: O'NEILL, JAMES B.

DESCRIPTORS: CONCEPT TEACHING; CURRICULUM GUIDES; *ECONOMIC EDUCATION; ECONOMIC FACTORS; *ECONOMICS; ENERGY; INSTRUCTIONAL MATERIALS; LEARNING ACTIVITIES; *MONEY MANAGEMENT; NEWSPAPERS; SECONDARY EDUCATION; SOCIAL SCIENCES; *MARKET SYSTEM

EDRS PRICE: EDRS PRICE MF-$0.76 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 71P.; FOR A RELATED DOCUMENT, SEE SO 008 865

ISSUE: RIEMAY76

ABSTRACT: INCLUDED IN THIS STUDENT BOOKLET ARE A VARIETY OF LEARNING ACTIVITIES FOR SECONDARY STUDENTS WHICH WILL AID THEIR UNDERSTANDING OF THE UNITED STATES ECONOMIC SYSTEM. BASIC CONCEPTS ARE INTRODUCED WHICH SHOW HOW A MARKET MECHANISM RESOLVES THE CONFLICT BETWEEN FINITE RESOURCES AND INFINITE DESIRES; HOW SUPPLY AND DEMAND INTERACT; AND HOW COMPETITION AMONG COMMODITIES AND AVAILABLE RESERVES, AS WELL AS AMONG PERSPECTIVE PURCHASERS, INFLUENCE PRICING. STUDENTS ARE EXPOSED TO THESE CONCEPTS ON A PERSONAL LEVEL HELPING THEM TO ANSWER THE FOLLOWING KINDS OF QUESTIONS: (1) WHAT KIND OF CAR SHOULD I BUY CONSIDERING THE ENERGY CRISIS? (2) SHOULD I GO TO COLLEGE OR TO WORK AFTER HIGH SCHOOL GRADUATION? (3) WHAT SUMMER JOBS ARE AVAILABLE? FOLLOWING AN INTRODUCTION WHICH DEFINES AND INTRODUCES THE MARKET SYSTEM, ACTIVITY CHAPTERS FOCUS ON CONSUMERISM, MONEY PROBLEMS, SCARCITY OF NATURAL RESOURCES, DISTRIBUTION OF GOODS, SUPPLY AND DEMAND, GETTING ENOUGH GASOLINE, THE CASE FOR RATIONING, BUSINESS CYCLES, AND PUBLIC SAFETY, AND FUTURE FEAR. ALTHOUGH THERE IS SOME VARIATION, MOST LESSONS BEGIN WITH A NEWSPAPER ARTICLE ON ONE OF THE FORMER-MENTIONED ECONOMIC TOPICS. THEN LISTS OF DIFFICULT TERMINOLOGY AND A NUMBER OF QUESTIONS FOLLOW TO HELP STUDENTS COMPREHEND WHAT THEY READ IN THE ARTICLE. THE TEACHER'S GUIDE IS SO 008 865. (AUTHOR/JH)

AVAILABILITY: EDUCATIONAL SERVICES BUREAU, DOW JONES AND COMPANY, INC., P.O. BOX 300, PRINCETON, NEW JERSEY 08540 ($1.95 EACH, MINIMUM ORDER 10 COPIES)

ACCESSION NUMBER: ED117024

CLEARINGHOUSE ACCESSION NUMBER: SO008865

PUBLICATION DATE: 75

TITLE: THE MARKET SYSTEM: DOES IT WORK? TEACHER'S EDITION.

PERSONAL AUTHOR: O'NEILL, JAMES B.

DESCRIPTORS: CONCEPT TEACHING; *ECONOMIC EDUCATION; ECONOMIC FACTORS; *ECONOMICS; ENERGY; INSTRUCTIONAL MATERIALS; LEARNING ACTIVITIES; *MONEY MANAGEMENT; NEWSPAPERS; SECONDARY EDUCATION; SOCIAL SCIENCES; *TEACHING GUIDES; *MARKET SYSTEM

EDRS PRICE: EDRS PRICE MF-$0.76 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 91P.; FOR A RELATED DOCUMENT, SEE SO 008 864

ISSUE: RIEMAY76

ABSTRACT: THIS DOCUMENT IS THE TEACHER'S GUIDE FOR SO 008 864. DEVELOPED FOR SECONDARY STUDENTS, THE MATERIALS AID STUDENTS IN THE UNDERSTANDING OF THE UNITED STATES ECONOMIC SYSTEM. ALONG WITH THE NARRATIVE FOUND IN THE STUDENT MATERIALS, THE GUIDE PRESENTS OBJECTIVES, CONCEPTS, PROCEDURES, AND EVALUATION FOR COMPLETING THE UNIT. THE MATERIALS ARE ARRANGED SO THAT THE EARLIEST LESSONS DEAL WITH THE MOST BASIC CONCEPTS AND LATER LESSONS INTRODUCE VARIATIONS AND COMPLEXITIES OF THE MAJOR CONCEPTS. CHAPTER TITLES CORRESPOND TO THE STUDENT VERSION OF THE MATERIALS. (AUTHOR/JH)

AVAILABILITY: EDUCATIONAL SERVICES BUREAU, DOW JONES AND COMPANY, INC., P.O. BOX 300, PRINCETON, NEW JERSEY 08540 ($2.95)

ACCESSION NUMBER: ED117858

CLEARINGHOUSE ACCESSION NUMBER: EA007937

PUBLICATION DATE: 21 FEB 76

TITLE: CONSERVING ENERGY IN SCHOOL BUILDINGS.

PERSONAL AUTHOR: BOICE, JOHN R.

DESCRIPTORS: *COMPUTER SCIENCE; *COST EFFECTIVENESS; ELEMENTARY EDUCATION; *ENERGY CONSERVATION; *SCHOOL IMPROVEMENT; SCHOOL MAINTENANCE; PSECS; *PUBLIC SCHOOLS

ENERGY CONSERVATION SERVICE

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$1.67 PLUS POSTAGE

DESCRIPTIVE NOTE: 8P.; PAPER PRESENTED AT THE ANNUAL CONVENTION OF THE AMERICAN ASSOCIATION OF SCHOOL ADMINISTRATORS (106TH, ATLANTIC CITY, NEW JERSEY, FEBRUARY 20-23, 1976)

ISSUE: RIEJUN76

ABSTRACT: EDUCATIONAL FACILITIES LABORATORIES IS DEVELOPING A COMPUTER-BASED TECHNICAL SERVICE--THE PUBLIC SCHOOLS ENERGY CONSERVATION SERVICE (PSECS), AS PRESENTLY ENVISIONED, PSECS WOULD BE CAPABLE OF PROVIDING EACH PARTICIPATING DISTRICT WITH INFORMATION IN FIVE AREAS: (1) GUIDELINES AND INSTRUCTION FOR ESTABLISHING AN ENERGY USAGE DATA BASE; (2) A COMPARISON OF THE ENERGY USAGE AT EACH OF THE DISTRICT'S PLANTS WITH GUIDELINES ESTABLISHED BY COMPUTER SIMULATIONS AND A NATIONWIDE DATA BASE OF SIMILAR SCHOOLS; (3) A "SELF-HELP" PLANT OPERATION AUDIT; (4) A COST-BENEFIT ANALYSIS OF MODIFICATIONS REQUIRING CAPITAL INVESTMENTS TAILORED TO EACH SCHOOL PLANT; AND (5) GUIDELINES FOR MONITORING THE RESULTS OF DISTRICT DECISIONS IN EACH AREA OF MODIFICATIONS. (AUTHOR/RLF)

ACCESSION NUMBER: ED118331

CLEARINGHOUSE ACCESSION NUMBER: RC009006

PUBLICATION DATE: JAN 76

TITLE: LAND-USE SYMPOSIUM PROCEEDINGS: PRIVATELY OWNED RURAL LANDS AND LAND-USE PLANNING (17TH, ALBUQUERQUE, NEW MEXICO, OCTOBER 15-16, 1975).

PERSONAL AUTHOR: AUSTIN, KEITH, COMP.; AND OTHERS

INSTITUTION CODE: BBB06084

SPONSORING AGENCY CODE: FGK21416

DESCRIPTORS: *DECISION MAKING; ECONOMIC FACTORS; ENERGY; ENVIRONMENTAL INFLUENCES; *FEDERAL GOVERNMENT; FOOD; FUTURES (OF SOCIETY); GLOBAL APPROACH; *LAND USE; LOCAL GOVERNMENT; *PLANNING; *RURAL AREAS; SOCIAL INFLUENCES; SPEECHES; STATE GOVERNMENT; SYMPOSIA; *NEW MEXICO; PRIVATE LANDS

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$6.61 PLUS POSTAGE

DESCRIPTIVE NOTE: 101P.

ISSUE: RIEJUN76

ABSTRACT: THIS REPORT INCLUDES 14 SPEECHES BY STATE AND LOCAL REPRESENTATIVES RELATIVE TO THE CONTROL OF LAND USE AND LAND USE PLANNING. THE SPEECHES ARE: (1) "THE STATUS OF PRIVATELY OWNED RURAL LAND IN NEW MEXICO" (A STATEMENT REGARDING THE CONFUSING STATUS OF CURRENT STATISTICS); (2) "KEYNOTE ADDRESS" (EMPHASIS ON LOCAL CONTROL); (3) "WHAT ARE THE PROS AND CONS OF PLANNING FOR PRIVATELY OWNED LANDS" (TWO SPEECHES, ONE EMPHASIZING THE ROLE OF THE PLANNING IMPLEMENTORS AND THE OTHER EMPHASIZING THE NEGATIVE ASPECTS OF FEDERAL CONTROL); (4) "LAND USE PLANNING NEEDED TO MEET LONG RANGE FOOD AND FIBER NEEDS" (A GLOBAL APPROACH EMPHASIZING AMERICAN RESPONSIBILITY); (5) "STATE LAWS AFFECTING LAND USE PLANNING" (A REVIEW); (6) "AN ASSESSMENT OF SOME ADVANTAGES AND DISADVANTAGES OF CURRENT TECHNIQUES IN LAND USE PLANNING AND CONTROL" (ZONING AND SUBDIVISION CONTROL; GROWTH MANAGEMENT AND DEVELOPMENT TIMING; ETC.); (8) "ECONOMIC IMPLICATIONS OF LAND USE PLANNING FOR PRIVATELY OWNED RURAL LANDS"; (9) "RESPONSE: SOCIAL AND ENVIRONMENT IMPLICATIONS"; (10) "FOR THE BEST INTEREST OF NEW MEXICO, WHO SHOULD BE INVOLVED IN THE DECISION MAKING ABOUT THE CHANGING USES OF PRIVATELY OWNED RURAL LANDS" (THREE DIFFERENT SPEAKERS); (11) "HOW SHOULD NEW MEXICO PLAN FOR THE PRIVATELY OWNED LANDS" (A PANEL PRESENTATION). (JC)

INSTITUTION NAME: NEW MEXICO STATE UNIV., LAS CRUCES. COOPERATIVE EXTENSION SERVICE.

SPONSORING AGENCY NAME: DEPARTMENT OF AGRICULTURE, WASHINGTON, D.C.

ACCESSION NUMBER: ED118363

CLEARINGHOUSE ACCESSION NUMBER: SE019887

PUBLICATION DATE: 73

TITLE: UNDERSTANDING THE NATIONAL ENERGY DILEMMA.

INSTITUTION CODE: BBB12738

DESCRIPTORS: *CONSERVATION (ENVIRONMENT); *DEPLETED RESOURCES; ENERGY; *ENERGY CONSERVATION; ENVIRONMENTAL EDUCATION; *NATURAL RESOURCES; *POLICY FORMATION; WORLD PROBLEMS

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS

DESCRIPTIVE NOTE: 56P.; CONTAINS 16 COLOR-CODED FOLD-OUTS

ISSUE: RIEJUN76

ABSTRACT: THIS GRAPHIC REPRESENTATION OF OUR ENERGY DILEMMA PROVIDES GOVERNMENT OFFICIALS, INDUSTRY, AND GENERAL PUBLIC WITH AN UNDERSTANDING OF THE BROAD PROBLEMS AND COMPLEXITY OF OUR ENERGY CRISIS. AN ENERGY DISPLAY SYSTEM PROJECTS EFFECTS OF ENERGY POLICIES ON OUR DOMESTIC ENERGY SITUATION. THIS DISPLAY CONTAINS SHEETS INDICATING TOTAL ENERGY FLOW PATTERNS, CROSS PLOTS PROVIDE SPECIFIC INFORMATION ON EACH ITEM. DATA ARE BASED ON 1950, 1960, AND 1970 FIGURES WITH PROJECTIONS FOR 1980 AND 1990. TO UNDERSTAND THE ENERGY DISPLAY SYSTEM, ACCOMPANYING FOLD-OUTS WITH SPECIFIC TEXT DESCRIPTIONS ARE PROVIDED. PERCENTAGES OF RESIDUAL AND COMMERCIAL, INDUSTRIAL, NON-ENERGY, TRANSPORTATION, ELECTRICAL ENERGY GENERATION, COAL/GAS, OIL/GAS, AND COAL/OIL USES ARE PRESENTED. HYDROELECTRIC, GEOTHERMAL, NUCLEAR, GAS (IMPORTS), GAS (DOMESTIC), COAL, OIL (IMPORTS), SHALE, AND OIL (DOMESTIC) ENERGY SOURCES ARE DISPLAYED IN PERCENTAGES IN FLOW PATTERNS. ENERGY UNITS ARE ONE MILLION BARRELS PER DAY OF OIL EQUIVALENT. FOLD-OUTS CONSIST OF TOTAL ENERGY FLOW PATTERNS (1950, 1960, 1970, 1980, 1990); CROSS PLOTS OF "EFFICIENCY," "END USES," "FORM OF USE," "SUPPLY/DEMAND CHARTS"--1960-1985, 1990-2050; CHARTS OF "GUIDANCE" REQUIRED AND DEMAND PROJECTIONS. APPENDED MATERIAL CONTAINS ENERGY REFERENCES AND CONVERSION TABLES. (BP)

AVAILABILITY: ERIC/SMEAC, THE OHIO STATE UNIVERSITY, 1200 CHAMBERS ROAD, 3RD FLOOR, COLUMBUS, OHIO 43212 (ON LOAN)

INSTITUTION NAME: GEORGETOWN UNIV., WASHINGTON, D.C. CENTER FOR STRATEGIC AND INTERNATIONAL STUDIES.

ACCESSION NUMBER: ED118451

CLEARINGHOUSE ACCESSION NUMBER: SE020307

PUBLICATION DATE: 18 JUN 75

TITLE: NUCLEAR MATERIALS SAFEGUARDS - MANPOWER NEEDS.

PERSONAL AUTHOR: KANTER, MANUEL A.

DESCRIPTORS: COLLEGE SCIENCE; *CURRICULUM DEVELOPMENT; ENERGY; *ENGINEERING EDUCATION; HIGHER EDUCATION; INSTRUCTION; *MANPOWER NEEDS; NUCLEAR PHYSICS; RADIATION; SAFETY; SCIENCE EDUCATION; *NUCLEAR ENERGY

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS

DESCRIPTIVE NOTE: 12P.; PAPER PRESENTED AT THE ANNUAL MEETING OF THE AMERICAN SOCIETY FOR ENGINEERING EDUCATION (COLORADO STATE UNIVERSITY, FT. COLLINS, COLORADO, JUNE 16-19, 1975); MARGINAL LEGIBILITY

ISSUE: RIEJUN76

ABSTRACT: NUCLEAR SAFEGUARD SYSTEMS, THEIR OPERATION AND IMPLICATIONS FOR FUTURE MANPOWER NEEDS, AND THE NEED FOR THESE TOPICS TO BE INTEGRATED INTO THE ENGINEERING EDUCATION CURRICULUM, ARE FOCUSED ON IN THIS PAPER. THE ELEMENTS OF A SAFEGUARD SYSTEM AND FACTORS INFLUENCING THE SELECTION OF A PARTICULAR SYSTEM ARE PRESENTED. PROJECTIONS CONCERNING THE USE OF NUCLEAR POWER IN THE 1980'S ARE CITED AS EVIDENCE OF THE NEED FOR ENGINEERING COURSES SPECIALIZING IN THIS AREA. THE AUTHOR STATES THAT WHILE ALL ENGINEERING STUDENTS SHOULD RECEIVE A "GENERAL ORIENTATION" TO THE TOPIC, THE LOW NUMBER OF ENGINEERS ELECTING NUCLEAR MATERIALS SAFEGUARDS AS A PROFESSION WILL LIMIT THE FEASIBILITY OF SEMESTER COURSES IN MATERIALS AND SAFEGUARDS TO A FEW INSTITUTIONS WHICH ARE STRONG IN THE TEACHING OF THE NUCLEAR FUEL CYCLE AND FUEL MANAGEMENT. (CP)

AVAILABILITY: ERIC/SMEAC, THE OHIO STATE UNIVERSITY, 1200 CHAMBERS ROAD, 3RD FLOOR, COLUMBUS, OHIO 43212 (ON LOAN)

ACCESSION NUMBER: ED119008

CLEARINGHOUSE ACCESSION NUMBER: SO008650

PUBLICATION DATE: 75

TITLE: OHIO GEOGRAPHERS: RECENT RESEARCH THEMES. VOLUME NUMBER 3: 1975.

PERSONAL AUTHOR: HANNAPP, VERN, ED.

INSTITUTION CODE: BBB12864

DESCRIPTOR: CULTURAL INTERRELATIONSHIPS; ECOLOGY; ENERGY CONSERVATION; ENVIRONMENTAL RESEARCH; GEOGRAPHIC CONCEPTS; GEOGRAPHY; HIGHER EDUCATION; *HUMAN GEOGRAPHY; LAND USE; *PHYSICAL GEOGRAPHY; RACIAL DISTRIBUTION; *SOCIAL SCIENCE RESEARCH; SOIL SCIENCE; URBANIZATION; OHIO

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 89P.; FOR RELATED DOCUMENTS, SEE SO 008 648 AND 649

ISSUE: RIEJUN76

ABSTRACT: EIGHT PROFESSIONAL GEOGRAPHY RESEARCH PAPERS PRESENTED AT THE GEOGRAPHY SECTION OF THE OHIO ACADEMY OF SCIENCE ANNUAL 1975 MEETING ARE PROVIDED. THE PAPERS EXAMINE VARIOUS ASPECTS OF THE ENVIRONMENT, ENERGY DISTRIBUTION, CULTURAL AND GEOGRAPHIC CHANGE, AND ETHNIC DISTRIBUTION. THE TITLES OF THE EIGHT PAPERS ARE (1) RACIAL AND ETHNIC REDISTRIBUTION IN DENVER, COLORADO: 1960 AND 1970; (2) A SYNTHESIS OF CONFLICTING VALUE PREMISES: INDUSTRIALIZATION AND RESTORATION IN THE VENETIAN LAGOON; (3) OPTIONS FOR ENVIRONMENTAL FARMING IN NORTHWEST OHIO; (4) SOILS AS A LINK IN AN ENVIRONMENT MONITORING CHAIN; (5) AN EXAMINATION OF ELECTRIC DEMAND BY GEOGRAPHIC UNITS; (6) SELECTED ASPECTS OF "FAIR" COMPETITION WITHIN OHIO; (7) SETTLEMENT CONVERGENCE AND RESIDUAL CULTURAL EFFECTS IN SOUTH CENTRAL OHIO; AND (8) AN INITIAL SURVEY ON URBAN ENCROACHMENT AND FARMING IN WAYNE COUNTY, OHIO. (DE)

AVAILABILITY: DEPARTMENT OF GEOGRAPHY, UNIVERSITY OF AKRON, AKRON, OHIO 44325 ($2.00)

INSTITUTION NAME: AKRON UNIV., OHIO. DEPT. OF GEOGRAPHY.

ACCESSION NUMBER: ED119312

CLEARINGHOUSE ACCESSION NUMBER: EA007948

PUBLICATION DATE: 75

TITLE: EXPLORING ENERGY CONSERVATION IN EDUCATIONAL FACILITIES. ANNUAL CONFERENCE (6TH, KNOXVILLE, TENN., JANUARY 22, 1975, JACKSON, TENN., JANUARY 23, 1975; NASHVILLE, TENN., JANUARY 24, 1975).

INSTITUTION CODE: XIE86195

DESCRIPTOR: *CLIMATE CONTROL; *EDUCATIONAL FACILITIES; ELECTRICITY; *ENERGY CONSERVATION; HEATING; ILLUMINATION LEVELS; LEGISLATION; MAINTENANCE; SCHOOL IMPROVEMENT; *SCHOOL PLANNING; *SOLAR RADIATION; STANDARDS; TENNESSEE

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$2.06 PLUS POSTAGE

DESCRIPTIVE NOTE: 37P.; PHOTOGRAPHS MAY REPRODUCE POORLY

ISSUE: RIEJUL76

ABSTRACT: THESE PAPERS PRESENTED TO EDUCATORS WITHIN THE STATE OF TENNESSEE REPRESENT THE LATEST THINKING REGARDING TECHNIQUES FOR LONG-RANGE ENERGY CONSERVATION WHEN PLANNING AND CONSTRUCTING SCHOOL FACILITIES. THE CURRENT AND FUTURE AVAILABILITY OF ENERGY SOURCES IS SUMMARIZED. SOME OF THE WASTEFUL PRACTICES CONSUMERS AND MANUFACTURERS HAVE PRACTICED ARE CITED AND SUGGESTIONS MADE FOR IMPROVEMENT. CODES AND STANDARDS RELATED TO ENERGY USE IN BUILDINGS ARE FOLLOWED BY SOME FINDINGS OF ENERGY USAGE STUDIES INCLUDING ILLUMINATION LEVELS, SOLAR ENERGY, AND VENTILATION. THREE COMPLETED SOLAR HEATING PROJECTS ARE DESCRIBED. THE FINAL PAPER GIVES SOME ADVICE FOR THE OPERATION AND MAINTENANCE OF HEATING AND AIR-CONDITIONING EQUIPMENT AND A SYSTEMATIC LIGHTING MAINTENANCE PROGRAM. (MLF)

INSTITUTION NAME: TENNESSEE UNIV., KNOXVILLE. SCHOOL PLANNING LAB.

ACCESSION NUMBER: ED119320

CLEARINGHOUSE ACCESSION NUMBER: EA007956

PUBLICATION DATE: 4 DEC 74

TITLE: SOLAR ENERGY SCHOOL HEATING AUGMENTATION EXPERIMENT. DESIGN, CONSTRUCTION AND INITIAL OPERATION. A REPORT.

INSTITUTION CODE: BBB12979

SPONSORING AGENCY CODE: BBB10350

DESCRIPTOR: BUILDING MATERIALS; *COMPONENT BUILDING SYSTEMS; COST EFFECTIVENESS; *ENERGY CONSERVATION; ENGINEERING GRAPHICS; EQUIPMENT STANDARDS; EXPERIMENTS; FACILITY CASE STUDIES; FACILITY GUIDELINES; *HEATING; *PERFORMANCE SPECIFICATIONS; *SOLAR RADIATION

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$4.67 PLUS POSTAGE

DESCRIPTIVE NOTE: 85P.

ISSUE: RIEJUL76

ABSTRACT: THIS REPORT DESCRIBES AN EXPERIMENTAL SOLAR HEATING SYSTEM, COMPLETE WITH THERMAL STORAGE AND CONTROLS, THAT HAS MET ALL THE HEATING REQUIREMENTS OF FIVE DETACHED CLASSROOMS OF THE FAUQUIER HIGH SCHOOL IN WARRENTON, VIRGINIA. THE OBJECTIVES OF THE EXPERIMENT WERE TO (1) DEMONSTRATE THAT SOLAR ENERGY CAN BE USED TO PROVIDE A SUBSTANTIAL PART OF THE ENERGY REQUIREMENTS OF A PUBLIC SCHOOL, (2) DETERMINE THE FUEL/ENERGY SAVINGS FROM THE USE OF THIS SYSTEM, (3) PROVIDE A SOUND ECONOMIC BASIS FOR PROJECTING COSTS AND COST/BENEFITS FROM THE USE OF SOLAR ENERGY, AND (4) DETERMINE FIGURES FOR PERFORMANCE, AND THE MAINTENANCE AND OPERATIONAL COSTS OF THE SYSTEM. FIGURES AND TEXT FULLY PRESENT THE SPECIFICATIONS OF THE SYSTEM. (AUTHOR/MLF)

REPORT NUMBER: ITC-R-090974; NSF-RA-N-74-019

AVAILABILITY: SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON, DC 20402 (STOCK NO. 038-000-00204-0, $1.45)

INSTITUTION NAME: INTERTECHNOLOGY CORP., WARRENTON, VA.

SPONSORING AGENCY NAME: NATIONAL SCIENCE FOUNDATION, WASHINGTON, D.C. RANN PROGRAM.

ACCESSION NUMBER: ED119375

CLEARINGHOUSE ACCESSION NUMBER: EA008015

PUBLICATION DATE: 74

TITLE: SOLAR HEATING/COOLING OF BUILDINGS: CURRENT BUILDING COMMUNITY PROJECTS. AN INTERIM REPORT.

INSTITUTION CODE: BBB01271

DESCRIPTOR: AIR CONDITIONING; *ARCHITECTURAL RESEARCH; *BUILDING INNOVATION; BUSINESS; *ENERGY CONSERVATION; HEATING; MECHANICAL EQUIPMENT; *PERFORMANCE SPECIFICATIONS; PRIVATE FINANCIAL SUPPORT; PROGRAM DESCRIPTIONS; *SOLAR RADIATION

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$2.06 PLUS POSTAGE

DESCRIPTIVE NOTE: 46P.; PREPARED BY THE COMMITTEE ON SOLAR ENERGY IN THE HEATING AND COOLING OF BUILDINGS

ISSUE: RIEJUL76

ABSTRACT: PROJECTS BEING CARRIED OUT BY THE PRIVATE SECTOR INVOLVING THE USE OF SOLAR ENERGY FOR HEATING AND COOLING BUILDINGS ARE PROFILED IN THIS REPORT. A SUBSTANTIAL PORTION OF THE DATA WERE COLLECTED FROM A BROAD CROSS-SECTION OF THE BUILDING COMMUNITY. DATA COLLECTION EFFORTS ALSO INVOLVED THE CANVASSING OF THE NEARLY 200 TRADE AND PROFESSIONAL SOCIETIES AND ORGANIZATIONS REPRESENTING THE VARIOUS SEGMENTS OF THE BUILDING COMMUNITY. EACH PROJECT PROFILE IDENTIFIES, WHEN POSSIBLE, THE STATUS OF THE ACTIVITY, THE PRINCIPAL PERSON TO BE CONTACTED FOR FURTHER INFORMATION, AND OTHER SUPPORT PERSONNEL. AN INDEX OF PROJECTS, ORGANIZATIONS, AND PROJECT PERSONNEL IS INCLUDED. (AUTHOR/MLF)

AVAILABILITY: THE EXECUTIVE DIRECTOR, BUILDING RESEARCH ADVISORY BOARD, COMMISSION ON SOCIOTECHNICAL SYSTEMS, NATIONAL RESEARCH COUNCIL, 2101 CONSTITUTION AVENUE, N.W., WASHINGTON, D.C. 20418 ($2.50)

INSTITUTION NAME: NATIONAL ACADEMY OF SCIENCES - NATIONAL RESEARCH COUNCIL, WASHINGTON, D.C. BUILDING RESEARCH ADVISORY BOARD.

ACCESSION NUMBER: ED119952

CLEARINGHOUSE ACCESSION NUMBER: SE019840

PUBLICATION DATE: 75

TITLE: ENERGY IN SOLID WASTE: A CITIZEN GUIDE TO SAVING.

INSTITUTION CODE: BBB04463

DESCRIPTOR: *CONSERVATION EDUCATION; CONSUMER EDUCATION; ENERGY; ENVIRONMENTAL EDUCATION; *HOME MANAGEMENT; *NATURAL RESOURCES; *RECYCLING; WASTE DISPOSAL; *WASTES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$2.06 PLUS POSTAGE

DESCRIPTIVE NOTE: 42P.

ISSUE: RIEJUL76

ABSTRACT: THIS BOOKLET CONTAINS INFORMATION FOR CITIZENS ON SOLID WASTES. IT DISCUSSES THE POSSIBLE ENERGY AVAILABLE IN COMBUSTIBLE AND NONCOMBUSTIBLE TRASH. IT SUGGESTS HOW CITIZENS CAN REDUCE WASTE AT HOME THROUGH DISCRIMINATING BUYING PRACTICES AND THROUGH RECYCLING AND REUSE OF RESOURCES. RECOMMENDATIONS ARE GIVEN FOR COMMUNITY ACTION

ALONG WITH STATE AND FEDERAL RESPONSIBILITIES IN RESOURCE USE. THE APPENDICES ALSO INCLUDE A CHECKLIST FOR THE HOME AND COMMUNITY AND A GLOSSARY OF SOLID WASTE TERMS. (MR)

AVAILABILITY: SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON, D.C. 20402 (STOCK NUMBER 4000-00319, $1.25; A 25% DISCOUNT IS ALLOWED ON ORDERS OF 100 OR MORE COPIES DELIVERED TO ONE ADDRESS)

INSTITUTION NAME: CITIZENS ADVISORY COMMITTEE ON ENVIRONMENTAL QUALITY.

ACCESSION NUMBER: ED119953

CLEARINGHOUSE ACCESSION NUMBER: SE019847

PUBLICATION DATE: DEC 74

TITLE: REPORT TO THE PRESIDENT AND TO THE COUNCIL ON ENVIRONMENTAL QUALITY.

INSTITUTION CODE: 88804463

DESCRIPTOR: *ANNUAL REPORTS; *CONSERVATION EDUCATION; *ECONOMIC CHANGE; ENERGY; *ENVIRONMENT; GOVERNMENT PUBLICATIONS; LAND USE; *NATURAL RESOURCES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$2.06 PLUS POSTAGE

DESCRIPTIVE NOTE: 45P.

ISSUE: RIEJUL76

ABSTRACT: THIS REPORT DISCUSSES THREE CURRENT ENVIRONMENTAL CONCERNS. FIRST, THE REPORT ADDRESSES THE ENERGY CRISIS AND RECOMMENDS THE ESTABLISHMENT OF A BALANCE BETWEEN INCREASED DOMESTIC ENERGY SUPPLIES AND REDUCED DOMESTIC ENERGY DEMANDS, THE RECYCLING OF SOLID WASTES TO SAVE ENERGY AND MATERIALS, AND THE NEED TO VIEW SHORT-TERM AND LONG-TERM ENERGY DEVELOPMENT IN TERMS OF NET ENERGY GAINED. SECOND, THE REPORT PRESENTS THE PROBLEM OF LOSS OF AGRICULTURAL LAND TO URBAN DEVELOPMENT. THE COMMITTEE RECOMMENDS FEDERAL AND STATE LAND USE PLANS TO COMBAT POSSIBLE AGRICULTURAL PRODUCTION LOSSES. THIRD, THE REPORT DISCUSSES THE NEED FOR CHANGE IN AMERICANS' LIVING PATTERNS TO RELIEVE PRESSURE ON NATURAL RESOURCES AND THE RURAL ENVIRONMENT. (MR)

AVAILABILITY: SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON, D.C. 20402 (STOCK NUMBER 040-000-00333-9, $1.25; 25% DISCOUNT ON ORDERS OF 100 OR MORE TO SAME ADDRESS)

INSTITUTION NAME: CITIZENS ADVISORY COMMITTEE ON ENVIRONMENTAL QUALITY.

ACCESSION NUMBER: ED119954

CLEARINGHOUSE ACCESSION NUMBER: SE019850

PUBLICATION DATE: JUN 73

TITLE: INDIVIDUAL ACTION FOR ENERGY CONSERVATION: COMMITTEE ON SCIENCE AND ASTRONAUTICS, U.S. HOUSE OF REPRESENTATIVES, NINETY-THIRD CONGRESS, FIRST SESSION. COMMITTEE PRINT .

INSTITUTION CODE: 88803810

DESCRIPTOR: *CONSERVATION EDUCATION; *ENERGY; *GOVERNMENT PUBLICATIONS; GUIDELINES; *HOME MANAGEMENT; NATURAL RESOURCES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$1.67 PLUS POSTAGE

DESCRIPTIVE NOTE: 10P.

ISSUE: RIEJUL76

ABSTRACT: THIS PAMPHLET LISTS SUGGESTIONS FOR CONSERVING ENERGY. THE SUGGESTIONS ARE INTENDED FOR USE BY CITIZENS. IT INCLUDES TIPS ON TRANSPORTATION PRACTICES EMPHASIZING DRIVING AND PURCHASING AN AUTOMOBILE, COOLING AND HEATING RESIDENTIAL HOMES, USE OF HOME APPLIANCES, AND PREPARING FOR A VACATION. THE ENERGY SAVING TIPS ARE ALSO AIMED AT SAVING MONEY FOR THE CONSUMER. (MR)

INSTITUTION NAME: CONGRESS OF THE U.S., WASHINGTON, D.C. HOUSE COMMITTEE ON SCIENCE AND TECHNOLOGY.

ACCESSION NUMBER: ED119957

CLEARINGHOUSE ACCESSION NUMBER: SE019998

PUBLICATION DATE: APR 74

TITLE: A TEACHER'S HANDBOOK ON ENERGY.

INSTITUTION CODE: DUN16650

DESCRIPTOR: CONSERVATION EDUCATION; *ELEMENTARY SECONDARY EDUCATION; *ENERGY; ENVIRONMENTAL EDUCATION; *INSTRUCTIONAL MATERIALS; *LEARNING ACTIVITIES; SCIENCE ACTIVITIES; SCIENCE EDUCATION; SCIENCE MATERIALS; *TEACHING GUIDES

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS

DESCRIPTIVE NOTE: 150P.; MARGINAL LEGIBILITY DUE TO COLORED PAGES

ISSUE: RIEJUL76

ABSTRACT: THIS HANDBOOK CONTAINS SUGGESTIONS FOR STUDENT ACTIVITIES AND CHECKLISTS FOR ENERGY-SAVING PRACTICES. IT ALSO PROVIDES BACKGROUND INFORMATION FOR THE TEACHER ON SOURCES OF ENERGY AND USES OF ENERGY. THIS SECTION ALSO CONTAINS CHARTS, GRAPHS, AND ILLUSTRATIONS WHICH CAN BE EASILY REPRODUCED FOR STUDENT USE. RESOURCE MATERIALS ARE ALSO REFERENCED FOR ADDITIONAL INFORMATION ON ENERGY CONCEPTS. (MR)

AVAILABILITY: ERIC/SMEAC, THE OHIO STATE UNIVERSITY, 1200 CHAMBERS ROAD, 3RD FLOOR, COLUMBUS, OHIO 43212 (ON LOAN)

INSTITUTION NAME: COLORADO STATE DEPT. OF EDUCATION, DENVER.

ACCESSION NUMBER: ED119967

CLEARINGHOUSE ACCESSION NUMBER: SE020170

PUBLICATION DATE: 75

TITLE: SOLAR DIRECTORY.

PERSONAL AUTHOR: PESKO, CAROLYN, ED.

DESCRIPTOR: ANNOTATED BIBLIOGRAPHIES; *DIRECTORIES; *ENERGY; *ENERGY CONSERVATION; ENVIRONMENT; *INFORMATION SOURCES; REFERENCE BOOKS; *SOLAR RADIATION; SURVEYS; SOLAR ENERGY

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS

DESCRIPTIVE NOTE: 605P.

ISSUE: RIEJUL76

ABSTRACT: THIS DIRECTORY IS DESIGNED TO HELP THE RESEARCHER AND DEVELOPER, THE MANUFACTURER AND DISTRIBUTOR, AND THE GENERAL PUBLIC COMMUNICATE TOGETHER ON A MUTUALLY BENEFICIAL BASIS. ITS CONTENT COVERS THE WIDE SCOPE OF SOLAR ENERGY ACTIVITY IN THE UNITED STATES PRIMARILY, BUT ALSO IN OTHER COUNTRIES, AT THE ACADEMIC, GOVERNMENTAL, AND INDUSTRIAL LEVELS. THIS SURVEY CONSISTS OF FIVE MAJOR SECTIONS: SECTION 1, A COMPILATION OF COMPUTERIZED DATA, PROVIDES DESCRIPTIONS OF THE INTERESTS, ACTIVITIES, OR PRODUCTS OF PARTICULAR INDIVIDUALS, COMPANIES, OR ORGANIZATIONS; SECTION 2, AN INVENTORY OF SOLAR PROJECTS, IS A COMPILATION OF BRIEF DESCRIPTIONS OF SOLAR HEATED AND/OR COOLED BUILDINGS PRESENTLY IN EXISTENCE, UNDER CONSTRUCTION, OR PLANNED FOR THE NEAR FUTURE; SECTION 3, AN ANNOTATED BIBLIOGRAPHY, SURVEYS THE TYPE OF PUBLISHED MATERIAL AVAILABLE ON THE SUBJECT OF SOLAR ENERGY; SECTION 4, APPENDICES, INCLUDES ABBREVIATIONS, LATE ADDITIONS, NSF/RANN SOLAR ENERGY RESEARCH GRANTS AND CONTRACTS IN FISCAL YEAR 1974, SOLAR ENERGY LEGISLATION, SOLAR ENERGY COURSES, MUSEY, AND ENVIRONMENTAL ACTIONS OF COLORADO; AND SECTIONS 5 AND 6, INDICES FOR SECTION 1, SECTION 5 IS AN INDEX OF ALL COMPANIES AND ORGANIZATIONS AND SECTION 6 IS A LISTING OF ALL INDIVIDUALS LISTED. INSTRUCTIONS FOR THE USE OF EACH SECTION ARE PROVIDED IN THE TEXT. (BT)

AVAILABILITY: ANN ARBOR SCIENCE PUBLISHERS, INCORPORATED, P.O. BOX 1425, ANN ARBOR, MICHIGAN 48106 ($20.00)

ACCESSION NUMBER: ED119970

CLEARINGHOUSE ACCESSION NUMBER: SE020291

PUBLICATION DATE: JUN 75

TITLE: NEW ENERGY ERA: SHORT TERM AND LONG TERM.

PERSONAL AUTHOR: BECKWITH, ROBERT

DESCRIPTOR: *EMPLOYMENT QUALIFICATIONS; EMPLOYMENT TRENDS; *ENERGY; ENERGY CONSERVATION; *ENGINEERING EDUCATION; *FUELS; MANPOWER UTILIZATION; *UTILITIES; ELECTRIC UTILITIES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$1.67 PLUS POSTAGE

DESCRIPTIVE NOTE: 19P.; PAPER PRESENTED AT THE ANNUAL MEETING OF THE AMERICAN SOCIETY FOR ENGINEERING EDUCATION (COLORADO STATE UNIVERSITY, FT. COLLINS, COLORADO, JUNE 16-19, 1975)

ISSUE: RIEJUL76

ABSTRACT: THIS PAPER EXAMINES THE CAUSES AND EFFECTS OF THE 1973 OIL EMBARGO IMPOSED BY OPEC. THE AUTHOR NOTES THAT SINCE THE EMBARGO, LITTLE POSITIVE ACTION HAS BEEN TAKEN TO REDUCE AMERICAN DEPENDENCE UPON A VERY LIMITED AND VERY EXPENSIVE ENERGY SOURCE. IN ORDER TO ACHIEVE ANY DEGREE OF INDEPENDENCE, IT WILL BE NECESSARY TO RAPIDLY EXPAND COAL AND NUCLEAR SOURCES. THE REMAINDER OF THE PAPER DISCUSSES THE ROLE OF THE ELECTRIC UTILITY IN THESE UNUSUAL AND UNCERTAIN TIMES AND THE ROLE OF THE ENGINEER IN HELPING THE UTILITY FULFILL ITS RESPONSIBILITIES. THE RESPONSIBILITY OF THE UTILITY IS TO PROVIDE A HIGH QUALITY OF SERVICE AT A REASONABLE COST TO THE CONSUMER. THE PAPER CONCLUDES WITH AN EXAMINATION OF THE EMPLOYMENT PATTERNS OF COMMONWEALTH EDISON AND DISCUSSES THE TRAITS AND QUALITIES YOUNG PROSPECTIVE ENGINEERS SEEKING EMPLOYMENT WITH A UTILITY SHOULD POSSESS. (BT)

ACCESSION NUMBER: ED119992

CLEARINGHOUSE ACCESSION NUMBER: SE020390

PUBLICATION DATE: JUN 75

TITLE: THE ENERGY SITUATION. A TWO-WEEK SELF-CONTAINED UNIT FOR THE SECONDARY SCHOOLS.

PERSONAL AUTHOR: HARDER, ALMA JEAN; NEWSOM, CAROLYN CLARK

INSTITUTION CODE: 88808747

SPONSORING AGENCY CODE: PGK57295

DESCRIPTOR: ENERGY; *ENERGY CONSERVATION; ENVIRONMENTAL EDUCATION; INSTRUCTIONAL MATERIALS; PHYSICAL SCIENCES; SCIENCE COURSE IMPROVEMENT PROJECT; SCIENCE EDUCATION; SECONDARY EDUCATION; *SECONDARY SCHOOL SCIENCE; *UNITS OF STUDY (SUBJECT FIELDS); *DEL MOD SYSTEM; NATIONAL SCIENCE FOUNDATION; NSF

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$3.50 PLUS POSTAGE

DESCRIPTIVE NOTE: 51P.

ISSUE: RIEJUL76

ABSTRACT: A UNIT OF STUDY IS PRESENTED IN THIS MONOGRAPH, INTENDED TO BE SELF-SUFFICIENT, THOUGH TEACHERS ARE URGED TO

READ AS MUCH MATERIAL AS POSSIBLE. OVERALL OBJECTIVES ARE PRESENTED. TIME ALLOTTED IS SUGGESTED AT TWO WEEKS. THE UNIT CONTAINS TEN MINI-UNITS, PLUS CLASS ACTIVITIES, CLASS DISCUSSION QUESTIONS, INDIVIDUAL STUDENT PROJECTS, AND POSSIBLE QUIZ QUESTIONS. A BIBLIOGRAPHY IS INCLUDED IN THE UNIT AS WELL AS FIVE SUGGESTED FIELD TRIPS. POSSIBLE FILMS WITH INFORMATION RELATING TO COST, AND PLACE OF PROCUREMENT. MAGAZINES AND POSSIBLE GUEST SPEAKERS ARE SUGGESTED. (EB)

REPORT NUMBER: NSF-GW-6703

AVAILABILITY: MR. JOHN F. REIMER, STATE SUPERVISOR OF SCIENCE AND ENVIRONMENTAL EDUCATION, DEPT. OF PUBLIC INSTRUCTION, JOHN G. TOWNSEND BUILDING, DOVER, DELAWARE 19901 (FREE WHILE SUPPLY LASTS)

INSTITUTION NAME: DEL MOD SYSTEM, DOVER, DEL.

SPONSORING AGENCY NAME: NATIONAL SCIENCE FOUNDATION, WASHINGTON, D.C.

ACCESSION NUMBER: ED120009

CLEARINGHOUSE ACCESSION NUMBER: SE020480

PUBLICATION DATE: APR 75

TITLE: ADDITIONAL SELECTED PAPERS FROM THE ANNUAL CONFERENCE OF THE NATIONAL ASSOCIATION FOR ENVIRONMENTAL EDUCATION (4TH, NEW ORLEANS, LOUISIANA, APRIL 1975).

INSTITUTION CODE: BBB05689

DESCRIPTOR: *CONFERENCE REPORTS; ENERGY; *ENVIRONMENT; *ENVIRONMENTAL EDUCATION; INSTRUCTIONAL MATERIALS; MODELS; *PROGRAM DESCRIPTIONS; PROGRAM DEVELOPMENT; PUBLICATIONS; LOUISIANA (NEW ORLEANS); NAEE; NATIONAL ASSOCIATION FOR ENVIRONMENTAL EDUCATION

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$3.50 PLUS POSTAGE

DESCRIPTIVE NOTE: 64P.; FOR A RELATED DOCUMENT, SEE SE 020 368

ISSUE: RIEJUL76

ABSTRACT: THESE REPORTS ARE DESIGNED TO PROVIDE ENVIRONMENTAL EDUCATORS WITH THE CURRENT ISSUES IN THE FIELD. TOPICS DISCUSSED IN THESE PAPERS INCLUDE GENERAL ENVIRONMENTAL CONCERNS SUCH AS ENVIRONMENTAL CONTROLS, ENERGY POLICIES, ENVIRONMENTAL CRISES AND PUBLIC RELATIONS, AND EFFECTS OF OFFSHORE DRILLING ON THE MARINE ENVIRONMENT. ILLUSTRATIONS FOR THE DEVELOPMENT OF EFFLUENT MONITORING EQUIPMENT AND LABORATORIES AS WELL AS THE DESIGN FOR A TWO-YEAR TECHNICAL TRAINING PROGRAM, ARE INCLUDED IN ONE OF THE PAPERS. GENERAL ENVIRONMENTAL EDUCATION IS THE CONCERN OF THE REMAINING PAPERS. (MA)

INSTITUTION NAME: NATIONAL ASSOCIATION FOR ENVIRONMENTAL EDUCATION, MIAMI, FLA.

ACCESSION NUMBER: ED120341

CLEARINGHOUSE ACCESSION NUMBER: CE005190

PROGRAM AREA: 95

PUBLICATION DATE: 76

TITLE: CAREER EDUCATION SCIENCE: UNITS FOR CAREER EXPLORATION IN SIXTH, SEVENTH OR EIGHTH GRADE.

PERSONAL AUTHOR: ROBINSON, MARY

DESCRIPTOR: *CAREER EDUCATION; *CAREER EXPLORATION; COURSE CONTENT; EDUCATIONAL OBJECTIVES; ENERGY; *INSTRUCTIONAL MATERIALS; INTEGRATED CURRICULUM; INTERMEDIATE GRADES; JUNIOR HIGH SCHOOLS; LEARNING ACTIVITIES; MANUFACTURING; NATURAL RESOURCES; OCCUPATIONAL CLUSTERS; PHYSICIANS ASSISTANTS; SCIENCE ACTIVITIES; *SCIENCE EDUCATION; SCIENTIFIC METHODOLOGY; *TEACHING GUIDES; TELECOMMUNICATION; UNIT PLAN; AIR TRANSPORTATION

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$7.35 PLUS POSTAGE

DESCRIPTIVE NOTE: 127P.; FOR RELATED DOCUMENTS, SEE CE 005 188-9 AND CE 005 191

ISSUE: RIEAUG76

ABSTRACT: THE GUIDE, DESIGNED FOR SIXTH, SEVENTH, OR EIGHTH GRADE TEACHERS AND STUDENTS, PRESENTS SIX SCIENCE INSTRUCTIONAL UNITS FOR CAREER EXPLORATION RELATED TO THE OCCUPATIONAL CLUSTERS MANUFACTURING (2), COMMUNICATION, TRANSPORTATION, HEALTH AND AGRIBUSINESS. THE UNITS DEAL SPECIFICALLY WITH: THE SCIENTIFIC METHOD FOR RESEARCH, USING THE SCIENTIFIC METHOD FOR RESEARCH; SYSTEMS ANALYSIS, AIR TRANSPORTATION, DUTIES OF A MEDICAL ASSISTANT, AND ENERGY FROM NATURAL RESOURCES. EACH UNIT IS BASED ON BEHAVIORAL OBJECTIVES WHICH ARE STATED AS TERMINAL OBJECTIVES, DEALING WITH THE SUBJECT MATTER TO BE COVERED, AND AS SPECIFIC OBJECTIVES, DEALING WITH THE STUDENT PERFORMANCE NECESSARY TO REACH THE TERMINAL OBJECTIVE. THE OTHER COMPONENTS OF EACH UNIT ARE: LIST OF SUGGESTED ACTIVITIES FOR INSTRUCTOR AND STUDENT; REFERENCE LIST; INFORMATION SHEETS OUTLINING THE CONTENT OF THE UNIT; ASSIGNMENT SHEETS PROVIDING SPECIFIC WRITTEN ACTIVITIES; JOB SHEETS PROVIDING CREATIVE PROJECTS; ANSWERS TO ASSIGNMENT SHEETS, A UNIT TEST, AND ANSWERS TO THE TEST. SOME UNITS ALSO CONTAIN TRANSPARENCY MASTERS. INSTRUCTIONS FOR USING THE GUIDE AND FORMS AND GUIDELINES FOR FIELD TRIPS, INTERVIEWS, AND RESOURCE PEOPLE ARE INCLUDED. (MS)

AVAILABILITY: OKLAHOMA STATE DEPT. OF VOCATIONAL AND TECHNICAL EDUCATION, 1515 WEST SIXTH, STILLWATER, OKLAHOMA 74074 ($2.50)

ACCESSION NUMBER: ED120416

CLEARINGHOUSE ACCESSION NUMBER: CE006652

PUBLICATION DATE: NOV 75

TITLE: AN ANALYSIS OF NUCLEAR RELATED TECHNICIAN MANPOWER IN WESTERN STATES FOR THE REGION SERVED BY THE WESTERN INTERSTATE NUCLEAR BOARD.

PERSONAL AUTHOR: BLAIR, LARRY M.; BARKER, LARRY

INSTITUTION CODE: BBB10571

SPONSORING AGENCY CODE: BBB13149

DESCRIPTOR: EMPLOYMENT LEVEL; *EMPLOYMENT PROJECTIONS; EMPLOYMENT STATISTICS; *EMPLOYMENT TRENDS; ENERGY; GOVERNMENT EMPLOYEES; *LABOR MARKET; MANPOWER NEEDS; MANPOWER UTILIZATION; NUCLEAR PHYSICS; OCCUPATIONAL SURVEYS; PRODUCTION TECHNICIANS; RADIOLOGIC TECHNOLOGISTS; STATISTICAL SURVEYS; SURVEYS; TABLES (DATA); *TECHNICAL OCCUPATIONS; UTILITIES; *NUCLEAR TECHNICIANS; NUCLEAR TECHNOLOGY; WESTERN INTERSTATE NUCLEAR REGION BOARD

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$6.01 PLUS POSTAGE

DESCRIPTIVE NOTE: 112P.; APPENDIX D IS A COMPUTER PRINTOUT WHICH WILL NOT REPRODUCE WELL IN MICROFICHE. SOME TABLES MAY NOT REPRODUCE CLEARLY DUE TO TYPE SIZE; PREPARED BY MANPOWER INFORMATION SYSTEMS BRANCH

ISSUE: RIEAUG76

ABSTRACT: THE STUDY PRESENTS THE RESULTS OF A SURVEY OF CURRENT (1975) AND PROJECTED NEAR-FUTURE (1975 THROUGH 1977) LABOR MARKET TRENDS FOR NUCLEAR-RELATED TECHNICIANS IN THE 12-STATE WESTERN INTERSTATE NUCLEAR REGION BOARD (WINB) AREA. THE SURVEY COVERED EMPLOYERS AND EDUCATORS/TRAINERS OF NUCLEAR RELATED MANPOWER IN PRIVATE INDUSTRY, RESEARCH LABORATORIES, GOVERNMENTAL AGENCIES, GOVERNMENT CONTRACTORS, EDUCATIONAL ORGANIZATIONS, AND MEDICAL FACILITIES. IN JANUARY, 1975, OVER 16,800 NUCLEAR RELATED TECHNICIANS WERE REPORTED EMPLOYED IN THE WESTERN STATES, WITH U.S. ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION (ERDA) CONTRACTORS THE LARGEST SINGLE EMPLOYER GROUP, BUT BY LATE 1977 PRIVATE ORGANIZATIONS AND UTILITIES ARE PROJECTED TO EMPLOY SUBSTANTIALLY MORE NUCLEAR RELATED TECHNICIANS THAN ERDA. A GROWTH RATE OF 10% A YEAR IS PROJECTED OVER THE NEXT THREE YEARS, THREE TIMES GREATER THAN THE GROWTH RATE PROJECTED FOR ALL TECHNICIANS IN THE U.S. ECONOMY. LARGE MANPOWER SHORTAGES ARE PREDICTED FOR NUCLEAR PRODUCTION AND REACTOR OPERATION AND FOR TESTS AND MEASUREMENT. A VERY LARGE EXCESS OF MANPOWER IS PROJECTED FOR NUCLEAR MEDICAL AND HEALTH RELATED TECHNICIANS. THE DATA COLLECTED IN THE SURVEY ARE PRESENTED IN TABLES AND DISCUSSED; THE SURVEY QUESTIONNAIRE, ADDITIONAL TABLES OF DATA, AND A LIST OF WINB REGION TRAINING INSTITUTIONS ARE APPENDED. (AUTHOR/AJ)

REPORT NUMBER: ERDA-78; UC-2

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, SPRINGFIELD, VIRGINIA 22161 (HC, $6.50)

INSTITUTION NAME: OAK RIDGE ASSOCIATED UNIVERSITIES, TENN. MANPOWER DEVELOPMENT DIV.

SPONSORING AGENCY NAME: ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION, WASHINGTON, D.C. DIV. OF LABOR RELATIONS.

ACCESSION NUMBER: ED120543

CLEARINGHOUSE ACCESSION NUMBER: CE006933

PUBLICATION DATE: 74

TITLE: POWER AND ENERGY: INDUSTRIAL ARTS CURRICULUM GUIDE. GRADES 9-12. CURRICULUM GUIDE 1335 (TENTATIVE).

INSTITUTION CODE: LJN43725

DESCRIPTOR: AUTO MECHANICS; BEHAVIORAL OBJECTIVES; CAREER EDUCATION; CAREER EXPLORATION; CURRICULUM DEVELOPMENT; *CURRICULUM GUIDES; ELECTROMECHANICAL TECHNOLOGY; *ENERGY; ENGINES; *INDUSTRIAL ARTS; LEARNING ACTIVITIES; *POWER MECHANICS; RESOURCE GUIDES; *SECONDARY EDUCATION; STATE CURRICULUM GUIDES; TEACHING GUIDES; LOUISIANA

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$2.06 PLUS POSTAGE

DESCRIPTIVE NOTE: 49P.; FOR RELATED DOCUMENTS, SEE CE 006 930-935

ISSUE: RIEAUG76

ABSTRACT: THE TENTATIVE GUIDE IN POWER AND ENERGY FOR SENIOR HIGH SCHOOL USE IS PART OF A SERIES OF INDUSTRIAL ARTS CURRICULUM MATERIALS DEVELOPED BY THE STATE OF LOUISIANA. THE COURSE IS DESIGNED TO PROVIDE "HANDS-ON" EXPERIENCE WITH TOOLS AND MATERIALS ALONG WITH A STUDY OF THE INDUSTRIAL PROCESSES IN POWER AND ENERGY. IN ADDITION, THE STUDENT IS ALSO OFFERED THE OPPORTUNITY TO MAKE TENATIVE CAREER DECISIONS, ANALYZE EMPLOYMENT TRENDS, AND EXPERIENCE GUIDANCE IN THE VARIOUS CAREERS RELATED TO THE POWER AND ENERGY JOB FAMILY. THE STUDENT HAS THE OPPORTUNITY TO DESIGN, PLAN, AND COMPLETE APPROPRIATE ARTICLES AND LEARN OF THE CAREERS RELATED TO THOSE ARTICLES. THE MAJOR UNITS OF THE COURSE ARE: SAFETY; INTRODUCTION TO POWER AND ENERGY; POWER SOURCES; WORK, ENERGY, POWER; BASIC TOOLS USED IN POWER AND ENERGY LABORATORY; MECHANICAL SYSTEMS; FLUID SYSTEMS; ELECTRICAL POWER SYSTEMS; COMBINED SYSTEMS OF POWER; AND INTERNAL COMBUSTION ENGINE. THE OUTLINE FORMAT INCLUDES PERFORMANCE OBJECTIVES WITH SUGGESTED LEARNING ACTIVITIES FOR THE MAJOR UNIT TOPICS AND SUBTOPICS. SUGGESTED RESOURCES REFER THE USER TO THE STATE DEPARTMENT OF EDUCATION'S ADOPTED TEXTBOOK LIST AND TO THE RESOURCE LIST APPENDED TO THE DOCUMENT. (AUTHOR/MJ)

REPORT NUMBER: VT-102-608

INSTITUTION NAME: LOUISIANA STATE DEPT. OF EDUCATION, BATON ROUGE.

ACCESSION NUMBER: ED120894

CLEARINGHOUSE ACCESSION NUMBER: EA007296

PROGRAM AREA: 95

PUBLICATION DATE: 76

TITLE: ERIC ABSTRACTS: ERIC DOCUMENT RESUMES ON ENERGY CONSERVATION AND THE SCHOOLS ERIC ABSTRACT SERIES, NUMBER 35.

INSTITUTION CODE: BBB01576; SJJ69850

SPONSORING AGENCY CODE: BBB06621

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; *ENERGY; *ENERGY CONSERVATION; *FUEL CONSUMPTION; HEATING; *LITERATURE REVIEWS; SOLAR RADIATION; *ENERGY CRISIS

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$1.67 PLUS POSTAGE

DESCRIPTIVE NOTE: 18P.

ISSUE: RIEAUG76

ABSTRACT: DOCUMENTS PREVIOUSLY ANNOUNCED IN RESOURCES IN EDUCATION (RIE) CONCERNING ENERGY CONSERVATION DISCUSS THE CURRENT ENERGY CRISIS AND ITS IMPLICATIONS FOR THE PUBLIC SCHOOLS, OFFER PRACTICAL SUGGESTIONS FOR REDUCING ENERGY CONSUMPTION, AND EXAMINE THE EFFICIENCY OF VARIOUS ENERGY SYSTEMS. THE INDEX TERMS USED TO SELECT THE DOCUMENTS ARE *ENERGY,* *ENERGY CONSERVATION,* AND *ENERGY CRISIS.* THE LISTING IS COMPLETE FOR ALL ISSUES OF (RIE) THROUGH SEPTEMBER 1975 AND CONTAINS 24 ANNOTATIONS. (AUTHOR/HLF)

CONTRACT NUMBER: OEC-0-8-080353-3514

AVAILABILITY: AMERICAN ASSOCIATION OF SCHOOL ADMINISTRATORS, 1801 NORTH MOORE STREET, ARLINGTON, VIRGINIA 22209 (STOCK NO. 021-00448, $2.00, PLUS $1.00 HANDLING CHARGE FOR EACH ORDER, QUANTITY DISCOUNTS, ORDERS UNDER $15.00 MUST BE PREPAID)

INSTITUTION NAME: AMERICAN ASSOCIATION OF SCHOOL ADMINISTRATORS, WASHINGTON, D.C. NATIONAL ACADEMY FOR SCHOOL EXECUTIVES.; OREGON UNIV., EUGENE. ERIC CLEARINGHOUSE ON EDUCATIONAL MANAGEMENT.

SPONSORING AGENCY NAME: NATIONAL INST. OF EDUCATION (DHEW), WASHINGTON, D.C.

ACCESSION NUMBER: ED120896

CLEARINGHOUSE ACCESSION NUMBER: EA007574

PROGRAM AREA: 95

PUBLICATION DATE: JUN 76

TITLE: LIFE-CYCLE COSTING. EDUCATIONAL FACILITIES DIGEST 5.

PERSONAL AUTHOR: PIELE, PHILIP K.; WRIGHT, DARRELL

INSTITUTION CODE: RUF19769; SJJ69850

SPONSORING AGENCY CODE: BBB06621

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; BUILDING DESIGN; BUILDING OPERATION; CONSTRUCTION COSTS; *COST EFFECTIVENESS; *ENERGY CONSERVATION; FACILITY GUIDELINES; *FACILITY PLANNING; FACILITY REQUIREMENTS; HEATING; *LITERATURE REVIEWS; MAINTENANCE; SCHOOL PLANNING; *LIFE CYCLE COSTING

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$1.67 PLUS POSTAGE

DESCRIPTIVE NOTE: 7P.

ISSUE: RIEAUG76

ABSTRACT: LIFE-CYCLE COSTING IS A MANAGEMENT TOOL THAT MAY ASSIST SCHOOL ADMINISTRATORS IN MAKING COST-EFFECTIVE DECISIONS ABOUT BUILDING AND IMPROVING SCHOOL FACILITIES. LIFE-CYCLE COSTING IS DEFINED AS DETERMINING THE TOTAL COST OF BUILDING CONSTRUCTION, OPERATION, AND MAINTENANCE OVER THE ASSUMED LIFE OF THE BUILDING. AN OVERVIEW OF THE RECENT LITERATURE ON THIS TOPIC IS PRESENTED ALONG WITH 15 ABSTRACTS FROM THE ERIC SYSTEM. (AUTHOR/HLF)

CONTRACT NUMBER: OEC-0-8-080353-3514

AVAILABILITY: COUNCIL OF EDUCATIONAL FACILITY PLANNERS, INTERNATIONAL, 29 WEST WOODRUFF AVENUE, COLUMBUS, OHIO 43210 ($1.50)

INSTITUTION NAME: COUNCIL OF EDUCATIONAL FACILITY PLANNERS, COLUMBUS, OHIO.; OREGON UNIV., EUGENE. ERIC CLEARINGHOUSE ON EDUCATIONAL MANAGEMENT.

SPONSORING AGENCY NAME: NATIONAL INST. OF EDUCATION (DHEW), WASHINGTON, D.C.

ACCESSION NUMBER: ED120904

CLEARINGHOUSE ACCESSION NUMBER: EA008028

PUBLICATION DATE: 2 APR 76

TITLE: YOU AND YOUR ARCHITECT AND ENERGY CONSERVATION SAVINGS FOR EDUCATIONAL FACILITIES. A REPORT.

PERSONAL AUTHOR: SCHRADER, CHARLES F.

INSTITUTION CODE: BBB13046

DESCRIPTOR: *ADMINISTRATOR GUIDES; *ARCHITECTS; *ARCHITECTURAL PROGRAMING; BUILDING DESIGN; BUILDING IMPROVEMENT; COST EFFECTIVENESS; *EDUCATIONAL FACILITIES; *ENERGY CONSERVATION; FUEL CONSUMPTION; ILLUMINATION LEVELS; LIGHTING; OPERATING EXPENSES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$1.67 PLUS POSTAGE

DESCRIPTIVE NOTE: 8P.

ISSUE: RIEAUG76

ABSTRACT: ESTIMATES FROM A NUMBER OF RELIABLE SOURCES INDICATE THAT REDUCTIONS IN ENERGY CONSUMPTION ARE POSSIBLE IN BOTH EXISTING AND NEW FACILITIES. ESTIMATES VARY FROM 25 TO 50 PERCENT FOR OLDER BUILDINGS AND 50 TO 80 PERCENT FOR NEW CONSTRUCTION. PRUDENT SCHOOL ADMINISTRATORS SHOULD TAKE STOCK OF THEIR PHYSICAL FACILITIES AND LOOK FOR POSSIBLE WAYS TO SAVE ON ENERGY CONSUMPTION. ARCHITECTS ARE PREPARED TO PERFORM AN ENERGY CONSUMPTION ANALYSIS OF AN EXISTING PLANT AND OFFER A CONSTRUCTIVE PROGRAM OF FACILITIES MODIFICATION TO CONSERVE ENERGY. DESIGNING NEW FACILITIES WITH ENERGY CONSERVATION AS A MAJOR DESIGN COMPONENT, ARCHITECTS ARE PREPARED TO WORK WITH SCHOOL OFFICIALS FROM THE INITIAL PROGRAM DEVELOPMENT AND SITE SELECTION THROUGH TO COMPLETED PROJECT. LISTS BRIEFLY ILLUSTRATE ENERGY CONSERVATION POSSIBILITIES THAT CAN BE IMPLEMENTED IN (1) CURRENT BUILDINGS BY EXISTING STAFF, (2) THE MODIFICATION OF EXISTING FACILITIES, AND (3) THE DESIGN OF NEW FACILITIES. (AUTHOR/HLF)

INSTITUTION NAME: AMERICAN INST. OF ARCHITECTS. NORTHERN CALIF. CHAPTER.

ACCESSION NUMBER: ED120967

CLEARINGHOUSE ACCESSION NUMBER: EA008130

PUBLICATION DATE: 75

TITLE: ENERGY CONSERVATION FOR SCHOOLS.

INSTITUTION CODE: SFO68743

DESCRIPTOR: ARCHITECTURAL PROGRAMING; BOARD OF EDUCATION POLICY; BUILDING DESIGN; BUILDING OPERATION; CLIMATE CONTROL; *COST EFFECTIVENESS; *ENERGY CONSERVATION; EQUIPMENT MAINTENANCE; *FACILITY GUIDELINES; *FACILITY REQUIREMENTS; FUEL CONSUMPTION; LIGHTING; MECHANICAL EQUIPMENT; STANDARDS; CANADA; HEAT RECOVERY SYSTEMS; INSULATION; *LIFE CYCLE COSTING

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$2.06 PLUS POSTAGE

DESCRIPTIVE NOTE: 26P.

ISSUE: RIEAUG76

ABSTRACT: INFORMATION INTENDED FOR THOSE CONCERNED WITH THE ADMINISTRATION, PLANNING, FINANCING, OPERATION, AND MAINTENANCE OF SCHOOL FACILITIES. APPLIES TO BOTH NEW AND EXISTING BUILDING. AN EXAMINATION OF MOTIVATION AND POLICIES RELATING TO ENERGY CONSERVATION IS FOLLOWED BY THE METHODS USED FOR QUANTITATIVE ASSESSMENT OF ENERGY SAVINGS RELATIVE TO EXTRA CAPITAL COST AND OPERATING PERSONNEL COST. ARCHITECTURAL DECISIONS IN DESIGNING NEW FACILITIES THAT DETERMINE THE BASIC ENERGY-USE PATTERNS INVOLVED IN OPERATION ARE DESCRIBED. AVAILABLE METHODS AND EQUIPMENT THAT CAN BE USED FOR ENERGY CONSERVATION ARE IDENTIFIED. AN ASSESSMENT IS MADE OF AVAILABLE METHODS AND EQUIPMENT IN TERMS OF POTENTIAL AND USEFULNESS IN SAVING ENERGY, FIRST COST, RELIABILITY, DEGREE OF COMPLEXITY, AND REQUIREMENTS FOR OPERATING STAFF. (AUTHOR/HLF)

REPORT NUMBER: 74-75/4166

AVAILABILITY: ONTARIO MINISTRY OF EDUCATION, 21ST FLOOR, MOWAT BLOCK, QUEEN'S PARK, TORONTO, CANADA M7A 1L2

INSTITUTION NAME: ONTARIO DEPT. OF EDUCATION, TORONTO.

ACCESSION NUMBER: ED121569

CLEARINGHOUSE ACCESSION NUMBER: SE019336

PUBLICATION DATE: 74

TITLE: ENERGY MATERIALS.

INSTITUTION CODE: JXQ38625

DESCRIPTOR: BIBLIOGRAPHIES; CONSERVATION EDUCATION; *ELEMENTARY SECONDARY EDUCATION; *ENERGY; ENERGY CONSERVATION; *ENVIRONMENTAL EDUCATION; *INSTRUCTIONAL MATERIALS; LEARNING ACTIVITIES; *RESOURCE MATERIALS

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$7.35 PLUS POSTAGE

DESCRIPTIVE NOTE: 127P.; PAGES 117-128 OF THE ORIGINAL DOCUMENT, ENTITLED *PUBLIC INTEREST REPORT--SOLUTIONS TO THE ENERGY CRISIS,* ARE COPYRIGHTED AND THEREFORE NOT AVAILABLE. THEY ARE NOT INCLUDED IN THE PAGINATION

ISSUE: RIEAUG76

ABSTRACT: THESE RESOURCE MATERIALS, DEVELOPED FOR USE BY TEACHERS IN THE ELEMENTARY AND SECONDARY SCHOOLS, ARE DESIGNED TO PROVIDE THE TEACHER WITH A BIBLIOGRAPHY, QUESTIONS AND ANSWERS, AND SUGGESTED CLASSROOM ACTIVITIES ALL RELATING TO THE ENERGY PROBLEM. THE MATERIALS ARE DESIGNED TO DEVELOP A CONSERVATION ETHIC AND GREATER UNDERSTANDING OF OUR ENERGY PROBLEM. THE PUBLICATION IS DIVIDED INTO THREE PARTS. PART I, ENERGY IN THE NATURAL ENVIRONMENT, CONSISTS OF A REPRESENTATIVE BIBLIOGRAPHY OF SOURCES CONCERNING ENERGY. INCLUDED ARE A SUBJECT INDEX, AN ALPHABETICAL LISTING OF BOOKS AND PERIODICALS BY TITLE, A LISTING OF AUDIOVISUAL MATERIALS, AND THE ADDRESSES OF THE PUBLISHERS OF THE BIBLIOGRAPHICAL ENTRIES. PART II, ENERGY IN THE SOCIAL ENVIRONMENT: A GUIDE TO RESOURCE MATERIAL, CONTAINS INSTRUCTIONAL MATERIALS DESIGNED TO ASSIST CLASSROOM TEACHERS IN DEVELOPING AND ENRICHING AN ENERGY AWARENESS UNIT OR LESSON. PART III, POSSIBLE CLASSROOM ACTIVITIES, CONTAINS AN ELEMENTARY, INTERMEDIATE, AND SECONDARY UNIT ON ENERGY. ADDITIONAL RESOURCES INCLUDE AN ENERGY SIMULATION GAME, THE IOWA GEOLOGICAL SURVEY MATERIALS, AND A LISTING OF ENVIRONMENTALLY RELATED ORGANIZATIONS AND THEIR ADDRESSES. A GLOSSARY OF TERMS CONCLUDES THIS PUBLICATION. (BT)

INSTITUTION NAME: IOWA STATE DEPT. OF PUBLIC INSTRUCTION, DES MOINES.

ACCESSION NUMBER: ED121570

CLEARINGHOUSE ACCESSION NUMBER: SE019775

PUBLICATION DATE: 75

TITLE: OIKOS, THE ENVIRONMENT AND EDUCATION. FASTBACK 52.

PERSONAL AUTHOR: O'HEARN, GEORGE T.

INSTITUTION CODE: BBB06282

DESCRIPTOR: *ECOLOGY; *EDUCATIONAL CHANGE; EDUCATIONAL IMPROVEMENT; ENERGY; ENVIRONMENT; *ENVIRONMENTAL EDUCATION; *LIFE STYLE; NATURAL RESOURCES; RELEVANCE (EDUCATION); *VALUES

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS

DESCRIPTIVE NOTE: 54P.

ISSUE: RIEAUG76

ABSTRACT: DESIGNED FOR INDIVIDUALS IN THE EDUCATIONAL PROCESS, THIS PUBLICATION CONCERNS THE QUALITY OF HUMAN LIFE. MAJOR ENVIRONMENTAL PROBLEMS ARE DISCUSSED. HANDLING OF THESE ISSUES WILL DETERMINE OUR FUTURE DIRECTION. MAN'S BELIEF THAT FREEDOM PLACES HIM SEPARATE FROM THE ENVIRONMENT CAUSES DRASTIC CHANGES, UPSETTING THE ECOSYSTEM BALANCE. WISE ENVIRONMENTAL MANAGEMENT AND CONSTRUCTING MAN-MADE ENVIRONMENTS TO ACCOMMODATE DEPENDENCY ON NATURE IS NECESSARY. THE CONCEPT OF LIMITATION IS OFTEN OVERLOOKED BECAUSE OF A BELIEF IN CONTINUOUS RESOURCE ABUNDANCE. EXAMINING RESOURCE DEPLETION AND OVERPOPULATION CAN BE RELATED TO INDIVIDUAL LIFE, LOCAL ENVIRONMENT(S), AND EARTH'S SYSTEMS. IN NATURE EVERYTHING RECYCLES, BUT MAN'S INTERVENTIONS CHANGE RECYCLING PROCESSES, PERIODS, AND ENERGY NEEDS. MAN IS INTERTWINED AND DEPENDENT ON LIFE FORMS AND EARTH'S RESOURCES. INTERDEPENDENCE IMPLIES STABILITY; STABILITY IS MAINTAINED THROUGH DIVERSITY. ENERGY IS THE DRIVING FORCE. MAN'S INTERVENTION IN NATURAL PROCESSES FOR ENVIRONMENTAL CONTROL CAUSED AN ENERGY CRISIS. CHANGES IN LIFE-STYLE, I.E., BABIES, LEISURE, WORK ETHIC, SOCIAL CONCERNS, AND EDUCATIONAL PURPOSES, INDICATE REDEFINITION OF QUALITY OF LIFE. THE BASIC INGREDIENTS FOR AN INFORMED CITIZENRY EXIST IN OUR EDUCATIONAL SYSTEM. REAWAKENING OF VALUES AND MOTIVES FOR POSITIVE ACTION IS NEEDED TO INITIATE CHANGE LEADING TO IMPROVED ENVIRONMENTAL QUALITY. (BP)

AVAILABILITY: PHI DELTA KAPPA, EIGHTH AND UNION, BOX 789, BLOOMINGTON, INDIANA 47401 ($0.50; MONEY MUST ACCOMPANY ALL ORDERS FOR LESS THAN $5.00 OR ADD $1.00 FOR HANDLING)

INSTITUTION NAME: PHI DELTA KAPPA EDUCATIONAL FOUNDATION, BLOOMINGTON, IND.

ACCESSION NUMBER: ED121580

CLEARINGHOUSE ACCESSION NUMBER: SE020450

PUBLICATION DATE: 75

TITLE: STUDY MODULES FOR CALCULUS-BASED GENERAL PHYSICS. INCLUDES MODULES 6 AND 7: WORK AND ENERGY; APPLICATIONS OF NEWTON'S LAWS.

PERSONAL AUTHOR: FULLER, ROBERT G., ED.; AND OTHERS

INSTITUTION CODE: PEA97825

SPONSORING AGENCY CODE: PGK57295

DESCRIPTOR: *CALCULUS; COLLEGE SCIENCE; *COURSE DESCRIPTIONS; ENERGY; *HIGHER EDUCATION; INDIVIDUALIZED CURRICULUM; INDIVIDUALIZED INSTRUCTION; INSTRUCTIONAL MATERIALS; MECHANICS (PHYSICS); MOTION; *PHYSICS; *PROGRAMED INSTRUCTION; SCIENCE EDUCATION; UNDERGRADUATE STUDY; KELLER PLAN; NEWTONS LAWS; *PERSONALIZED SYSTEM OF INSTRUCTION; PSI

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$3.50 PLUS POSTAGE

DESCRIPTIVE NOTE: 73P.; PREPARED AT A COLLEGE FACULTY WORKSHOP (UNIVERSITY OF COLORADO, BOULDER, JUNE 23-JULY 11, 1975); DIRECTIONS FOR THE CBP MODULES ARE FOUND IN SE 020 448; RELATED DOCUMENTS ARE SE 020 449-461

ISSUE: RIEAUG76

ABSTRACT: THIS IS PART OF A SERIES OF 42 CALCULUS BASED PHYSICS (CBP) MODULES TOTALING ABOUT 1,000 PAGES. THE MODULES INCLUDE STUDY GUIDES, PRACTICE TESTS, AND MASTERY TESTS FOR A FULL-YEAR INDIVIDUALIZED COURSE IN CALCULUS-BASED PHYSICS BASED ON THE PERSONALIZED SYSTEM OF INSTRUCTION (PSI). THE UNITS ARE NOT INTENDED TO BE USED WITHOUT OUTSIDE MATERIALS. REFERENCES TO SPECIFIC SECTIONS IN FOUR ELEMENTARY PHYSICS TEXTBOOKS APPEAR IN THE MODULES. SPECIFIC MODULES INCLUDED IN THIS DOCUMENT ARE: MODULE 6--WORK AND ENERGY AND MODULE 7--APPLICATIONS OF NEWTON'S LAWS. (CP)

AVAILABILITY: UNIVERSITY OF NEBRASKA, CBP WORKSHOP, BEHLEN LABORATORY OF PHYSICS, LINCOLN, NEBRASKA 68508 (ENTIRE SET OF 42 MODULES, $15.00)

INSTITUTION NAME: NEBRASKA UNIV., LINCOLN.

SPONSORING AGENCY NAME: NATIONAL SCIENCE FOUNDATION, WASHINGTON, D.C.

ACCESSION NUMBER: ED122363

CLEARINGHOUSE ACCESSION NUMBER: EA008097

PROGRAM AREA: 80

PUBLICATION DATE: 75

TITLE: ENERGY CONSERVATION IN SCHOOL FACILITIES. ENERGY CONSERVATION IN EXISTING SCHOOL FACILITIES: AN OVERVIEW. ENERGY CONSERVATION MATERIALS PACKAGE NUMBER 1.

INSTITUTION CODE: BB013177

SPONSORING AGENCY CODE: BBB07626

DESCRIPTOR: *BUILDING OPERATION; COST EFFECTIVENESS; *EDUCATIONAL FACILITIES; ELEMENTARY SECONDARY EDUCATION; *ENERGY CONSERVATION; *EQUIPMENT MAINTENANCE; FUEL CONSUMPTION; HEATING; HIGHER EDUCATION; LIGHTING; MECHANICAL EQUIPMENT; *PREVENTION; SCHEDULING; THERMAL ENVIRONMENT; UTILITIES; VENTILATION; ELEMENTARY SECONDARY EDUCATION ACT TITLE VI; ESEA TITLE V

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$1.67 PLUS POSTAGE

DESCRIPTIVE NOTE: 16P.; A RELATED DOCUMENT IS EA 008 098

ISSUE: RIESEP76

ABSTRACT: SCHOOL ENERGY-SAVING STRATEGIES CAN BE DEVELOPED AND IMPLEMENTED AT THREE LEVELS: (1) PROGRAMMATIC--THE EDUCATIONAL PROGRAM AND SCHEDULE OF ACTIVITIES TAKING PLACE AT THE SCHOOL; (2) OPERATIONAL--HOW THE FACILITY AND ITS SUPPORTING SYSTEMS ARE RUN TO HOUSE AND SUPPORT THESE EDUCATIONAL ACTIVITIES; AND (3) PHYSICAL PLANT AND ITS OPERATING SYSTEM. MODIFICATIONS CAN BE MADE IN SCHEDULING, LIGHTING, HEATING, COOLING, AND VENTILATION. THE ESTABLISHMENT OF TRAINING PROGRAMS FOR PERSONNEL INVOLVED IN THE MAINTENANCE OF MECHANICAL SYSTEMS WILL INCREASE EQUIPMENT LIFE AND EFFECTIVENESS. EXISTING SYSTEMS CAN BE REPLACED WITH NEW MECHANICAL SYSTEMS THAT HAVE BETTER ENERGY CONSUMPTION CHARACTERISTICS. (AUTHOR/MLF)

INSTITUTION NAME: COLORADO STATE DEPT. OF EDUCATION, DENVER. INTERSTATE ENERGY CONSERVATION LEADERSHIP.

SPONSORING AGENCY NAME: BUREAU OF ELEMENTARY AND SECONDARY EDUCATION (DHEW/OE), WASHINGTON, D.C. DIV. OF STATE AGENCY COOPERATION.

ACCESSION NUMBER: ED122364

CLEARINGHOUSE ACCESSION NUMBER: EA008098

PROGRAM AREA: 80

PUBLICATION DATE: 75

TITLE: DISTRICT LEVEL PLAN FOR CONSERVATION. AN OUTLINE FOR A DISTRICT-LEVEL PLAN FOR ENERGY CONSERVATION. ENERGY CONSERVATION MATERIALS PACKAGE NUMBER 2.

INSTITUTION CODE: BB013177

SPONSORING AGENCY CODE: BBB07626

DESCRIPTOR: AIR CONDITIONING; BUILDING OPERATION; CHANGE STRATEGIES; CHECK LISTS; COMMITTEES; COST EFFECTIVENESS; *EDUCATIONAL FACILITIES; ELEMENTARY SECONDARY EDUCATION; *ENERGY CONSERVATION; EQUIPMENT MAINTENANCE; FUEL CONSUMPTION; LIGHTING; *PREVENTION; *PROGRAM GUIDES; SCHOOL DISTRICTS; UTILITIES; VENTILATION; ELEMENTARY SECONDARY EDUCATION ACT TITLE VI; *ENERGY AUDIT; ESEA TITLE V

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$2.06 PLUS POSTAGE

DESCRIPTIVE NOTE: 29P.; A RELATED DOCUMENT IS EA 008 097

ISSUE: RIESEP76

ABSTRACT: FEATURES SHARED BY SUCCESSFUL SCHOOL ENERGY CONSERVATION PROGRAMS INCLUDE: (1) THE FORMATION OF A DISTRICT ENERGY CONSERVATION COMMITTEE THAT INVOLVES AS MANY SEGMENTS OF THE EDUCATIONAL COMMUNITY AS PRACTICAL, (2) THE ASSIGNMENT OF SPECIFIC RESPONSIBILITIES TO SPECIFIC INDIVIDUALS, (3) CAREFUL PLANNING IN THE DEVELOPMENT OF GUIDELINES, (4) RECORDING ENERGY USE PATTERNS--AN *ENERGY AUDIT--FOR EACH BUILDING IN THE DISTRICT, AND (5) PERSISTENT FOLLOWUP AND EVALUATION EFFORTS TO SEE THAT ESTABLISHED GUIDELINES ARE FOLLOWED. CONSERVATION CHECKLISTS AND ENERGY USAGE GUIDELINES CONCLUDE THE GUIDE. (AUTHOR/MLF)

INSTITUTION NAME: COLORADO STATE DEPT. OF EDUCATION, DENVER. INTERSTATE ENERGY CONSERVATION LEADERSHIP.

SPONSORING AGENCY NAME: BUREAU OF ELEMENTARY AND SECONDARY EDUCATION (DHEW/OE), WASHINGTON, D.C. DIV. OF STATE AGENCY COOPERATION.

ACCESSION NUMBER: ED122440

CLEARINGHOUSE ACCESSION NUMBER: EA008236

PUBLICATION DATE: JAN 76

TITLE: METHODS OF CONSERVING HEATING ENERGY UTILIZED IN THIRTY-ONE PUBLIC SCHOOL SYSTEMS.

PERSONAL AUTHOR: DAVIS, KATHY EGGERS

INSTITUTION CODE: XIE48130

DESCRIPTOR: *ENERGY CONSERVATION; EQUIPMENT MAINTENANCE; *FUEL CONSUMPTION; *HEATING; *METHODS; SCHOOL SURVEYS; *SCHOOL SYSTEMS; THERMAL ENVIRONMENT; UTILITIES; MEMPHIS CITY SCHOOLS; TENNESSEE (MEMPHIS)

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$2.06 PLUS POSTAGE.

DESCRIPTIVE NOTE: 32P.

ISSUE: RIESEP76

ABSTRACT: THE MEMPHIS CITY SCHOOL SYSTEM WAS NOTIFIED BY MEMPHIS LIGHT, GAS, AND WATER THAT IT WAS NECESSARY TO REDUCE ITS CONSUMPTION OF NATURAL GAS DURING THE WINTER OF 1975-76. A SURVEY WAS DEVELOPED AND SENT TO 44 LARGE PUBLIC SCHOOL SYSTEMS TO DETERMINE WHICH METHODS OF HEATING ENERGY CONSERVATION WERE USED MOST FREQUENTLY AND WHICH METHODS WERE MOST SUCCESSFUL. COMPLETED SURVEYS HAVE BEEN RECEIVED FROM 31 (70 PERCENT) OF THE SCHOOL SYSTEMS. THE THREE MOST FREQUENTLY USED METHODS OF HEATING ENERGY CONSERVATION WERE (1) REDUCE BUILDING TEMPERATURES DURING HOLIDAY PERIODS, (2) PLACE STRONGER EMPHASIS ON PROPER MAINTENANCE OF HEATING EQUIPMENT, AND (3) REDUCE BUILDING TEMPERATURE. THE FOUR METHODS OF HEATING ENERGY CONSERVATION THAT WERE PERCEIVED AS HIGHLY SUCCESSFUL WERE THE ABOVE FIRST TWO PLUS (3) SWITCH TO NIGHT HEATING CYCLE BEFORE SCHOOL CLOSES FOR THE DAY, AND (4) SCHEDULE CUSTODIAL CARE DURING THE DAY INSTEAD OF NIGHT. (AUTHOR/MLF)

INSTITUTION NAME: MEMPHIS CITY SCHOOL SYSTEM, TENN.

ACCESSION NUMBER: ED122676

CLEARINGHOUSE ACCESSION NUMBER: HE007661

PUBLICATION DATE: NOV 75

TITLE: ENERGY PLANNING: A TOTAL CONCEPT.

PERSONAL AUTHOR: HALL, STEPHEN S. J.

INSTITUTION CODE: BBB07296

DESCRIPTOR: AUTOMATION; COMPUTER SCIENCE; *COST EFFECTIVENESS; *EFFICIENCY; *ENERGY CONSERVATION; EXPENDITURES; FACILITY PLANNING; FUEL CONSUMPTION; *HIGHER EDUCATION; PRESERVATION; PROGRAM EVALUATION; RESOURCE ALLOCATIONS; SCHOOL CONSTRUCTION; *SCHOOL MAINTENANCE; SERVICE VEHICLES; UNIVERSITIES; *HARVARD UNIVERSITY

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 6P.

ISSUE: RIESEP76

ABSTRACT: HARVARD'S ENERGY CONSERVATION PLAN IS PRESENTED IN DETAIL WITH THE HOPE THAT IT WILL SUGGEST PRACTICAL, COST-EFFECTIVE ENERGY-SAVING IDEAS TO OTHER INSTITUTIONS, AND TO DISPEL FREQUENTLY-EXPRESSED FEARS CONCERNING THE FEASIBILITY AND ACCEPTANCE PROBLEMS OF THIS TYPE OF PROGRAM. THE TOTAL ENERGY PLAN INCORPORATES NUMEROUS SPECIFIC ELEMENTS THAT SHOULD BE SEEN NOT IN ISOLATION BUT AS COMPONENTS OF THE OVERALL SYSTEM. IT ENABLED HARVARD TO SAVE AN ESTIMATED $2.5 MILLION IN ENERGY COSTS IN FISCAL 1975. THIS DOLLAR AMOUNT REFLECTS EVEN MORE IMPRESSIVE SAVINGS IN REAL TERMS, SINCE THE DOLLAR COST OF ENERGY HAS CONTINUALLY INCREASED. OFFSETTING THE UNIVERSITY'S SAVINGS IN EFFICIENCY. THE USE OF THE GRAPH FACTOR IS DESCRIBED, ALONG WITH THE EMPHASIS ON RESULTS, THE CRITICAL HUMAN ELEMENT, AUTOMATION AND COMPUTERIZED SYSTEMS, THE UNIVERSITY'S PLANNED ENERGY PRESERVATION (PEP) TEAM, THE HARVARD INSPECTION TEAM (HIT) TRUCK FOR PREVENTIVE MAINTENANCE, THE USE OF STORM WINDOWS, AND PLANNED CONSTRUCTION OF A REVOLUTIONARY TOTAL ENERGY PLANT. THE FUTURE OUTLOOK FOR ENERGY CONSERVATION IS ASSESSED. (LBH)

AVAILABILITY: NACUBO, ONE DUPONT CIRCLE, SUITE 510 WASHINGTON, D.C. 20036

JOURNAL CITATION: NACUBO PROFESSIONAL FILE; V7 N8 P1-5 NOV 1975

INSTITUTION NAME: NATIONAL ASSOCIATION OF COLL. AND UNIV. BUSINESS OFFICERS, WASHINGTON, D.C.

ACCESSION NUMBER: ED122750

CLEARINGHOUSE ACCESSION NUMBER: IR003364

PUBLICATION DATE: FEB 76

TITLE: COMMUNICATIONS FOR SURVIVAL: PERSPECTIVE AND PROPOSED PROGRAMS.

PERSONAL AUTHOR: GOLDMARK, PETER C.; AND OTHERS

INSTITUTION CODE: BBB00306

DESCRIPTOR: ADULT EDUCATION; *CITY PROBLEMS; COMMUNICATIONS; COMMUNICATION SATELLITES; COMMUNITY INVOLVEMENT; *DECENTRALIZATION; DELIVERY SYSTEMS; EMPLOYMENT; ENERGY; FUTURES (OF SOCIETY); HEALTH SERVICES; POLLUTION; RESEARCH PROJECTS; *RURAL DEVELOPMENT; *TECHNOLOGICAL ADVANCEMENT; *TELECOMMUNICATION; TRANSPORTATION; VOCATIONAL EDUCATION; *NEW RURAL SOCIETY

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 57P.; SPECIAL PAPER TO BE PUBLISHED IN SCIENCE MAGAZINE, BY THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE, FOR THE UNITED NATION'S CONFERENCE ON HUMAN SETTLEMENTS, MAY-JUNE 1976. NOT AVAILABLE IN HARD COPY DUE TO MARGINAL LEGIBILITY OF ORIGINAL

ISSUE: RIESEP76

ABSTRACT: THE NEW RURAL SOCIETY (NRS) PROJECT IS FEDERALLY FUNDED TO APPLY TELECOMMUNICATIONS TECHNOLOGY TO EASE THE PLIGHT OF THE CITIES BY UPGRADING LIFE IN RURAL COMMUNITIES. THE RESULTING VOLUNTARY DECENTRALIZATION OF PEOPLE, BUSINESS, AND GOVERNMENT, WILL, IT IS HOPED, CREATE THE NECESSARY CONDITIONS TO BRING THE URBAN AND ENERGY CRISES UNDER CONTROL. DURING ITS FOUR AND A HALF YEARS OF EXISTENCE THE NRS PROJECT HAS CONDUCTED A BROAD STUDY OF THE HISTORICAL INFLUENCES OF SCIENCE AND TECHNOLOGY AND A NUMBER OF STUDIES IN FIVE SPECIFIC AREAS: EMPLOYMENT, HEALTH CARE, CONTINUING EDUCATION AND VOCATIONAL TRAINING, ENTERTAINMENT AND CULTURAL OPPORTUNITIES, AND COMMUNITY INTERACTION. THIS PAPER GIVES A GENERAL OVERVIEW OF THESE FIVE SPECIFIC STUDIES AND DISCUSSES THE IMPLEMENTATION OF NRS RECOMMENDATIONS, BOTH IN GENERAL AND IN DETAIL FOR SUCH AREAS AS TRANSPORTATION, URBAN NEEDS, EMPLOYMENT, HEALTH CARE, ADULT AND VOCATIONAL EDUCATION, POSTAL SERVICE IN RURAL AREAS, ENVIRONMENTAL PROTECTION, ENERGY, AND COMMUNICATION SERVICE. (JY)

INSTITUTION NAME: FAIRFIELD UNIV., CONN.

ACCESSION NUMBER: ED123033

CLEARINGHOUSE ACCESSION NUMBER: SE019073

PUBLICATION DATE: 74

TITLE: TECHNOLOGY AND DEVELOPMENT. UNITAR NEWS VOLUME 6 NUMBER 4.

PERSONAL AUTHOR: MCDOUGALL, CHRISTINA, ED.

INSTITUTION CODE: BBB06383

DESCRIPTOR: *DEVELOPING NATIONS; *DEVELOPMENT; *ENERGY; *INTERNATIONAL ORGANIZATIONS; SCIENCE EDUCATION; SCIENCE PROGRAMS; *TECHNOLOGY; *UNITED NATIONS

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$3.50 PLUS POSTAGE

DESCRIPTIVE NOTE: 51P.; SMALL TYPE USED IN FOOTNOTE INFORMATION

ISSUE: RIESEP76

ABSTRACT: IN THIS UNITAR NEWS ISSUE ARE SURVEYED SOME OF THE ELEMENTS OF TECHNOLOGICAL CHANGE AND THEIR EFFECT ON DEVELOPMENT. THE KEY ISSUES ARE PRESENTED IN DIGEST FORM TO STIMULATE QUESTIONS, DISSEMINATE IDEAS, AND PRESENT A RANGE OF OPINIONS. INCLUDED IN THIS ISSUE IS A CHART SHOWING THE VARIOUS BODIES, COMMITTEES, AND COMMISSIONS COMPRISING THE UNITED NATIONS ECONOMIC AND SOCIAL COUNCIL. (LS)

AVAILABILITY: UNITAR NEWS, 801 UNITED NATIONS PLAZA, NEW YORK, NEW YORK 10017 (FREE; 2-9 COPIES, $1.00 EA.; 10-24 COPIES, $0.80 EA.; 25-99 COPIES, $0.60 EA.; 100-300 COPIES, $0.50 EA.; OVER 300 COPIES, $0.30 EA.; POSTAGE AND HANDLING ADDITIONAL)

INSTITUTION NAME: UNITED NATIONS, NEW YORK, N. Y. INST. FOR TRAINING AND RESEARCH.

ACCESSION NUMBER: ED123035

CLEARINGHOUSE ACCESSION NUMBER: SE019496

PUBLICATION DATE: DEC 74

TITLE: THE HOUSEHOLD ENERGY GAME.

PERSONAL AUTHOR: SMITH, THOMAS W.; JENKINS, JOHN

INSTITUTION CODE: BBB07176

DESCRIPTOR: CONSERVATION EDUCATION; CONSUMER EDUCATION; DEPLETED RESOURCES; ECOLOGICAL FACTORS; *EDUCATIONAL GAMES; *ENERGY; *ENERGY CONSERVATION; *ENVIRONMENTAL EDUCATION; *INSTRUCTIONAL MATERIALS; LEARNING ACTIVITIES; SCIENCE EDUCATION

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS

DESCRIPTIVE NOTE: 20P.

ISSUE: RIESEP76

ABSTRACT: THE HOUSEHOLD ENERGY GAME HAS BEEN DEVELOPED TO PROVIDE SOME INDICATION OF ENERGY USE AND INDIVIDUAL MANAGEMENT. THE GAME IS DIVIDED INTO TWO SECTIONS. IN THE FIRST SECTION, ONE IS TO DEVISE ONE'S OWN ENERGY BUDGET. ENERGY USE IS CALCULATED IN THE AREAS OF TRANSPORTATION, HEATING, HOT WATER, AIR CONDITIONING, AND APPLIANCES. IN EACH OF THESE MAJOR CATEGORIES, FACTORS INFLUENCING THAT PARTICULAR ENERGY NEED ARE INDICATED, AFTER SELECTING FIGURES FOR ONE'S ENERGY CONSUMPTION FROM THE ACCOMPANYING CHART, INSTRUCTIONS ARE PROVIDED FOR TRANSFERRING THEM TO A TALLY SHEET, AND THEN TO A GRID. TO AVOID CONFUSION, THE VARIOUS ENERGY UNITS ARE REPRESENTED BY "SQUARES." ENERGY "SQUARES" CAN BE TRANSLATED INTO DOLLARS. HAVING DEVISED AN ENERGY BUDGET, ONE CAN SEE WHERE ONE'S ENERGY CONSUMPTION STANDS IN RELATION TO THE AVERAGE AMERICAN HOUSEHOLD. PART TWO IS CONCERNED WITH WAYS TO MODIFY A BUDGET TO SAVE ENERGY. USING THE TALLY SHEET, POINTS ARE LISTED FOR ENERGY CONSERVATION IN EACH OF THE CATEGORIES, AFTER RECEIVING THE ENERGY SAVING MEASURES GIVEN, THE REVISED ENERGY BUDGET CAN BE RECORDED ON THE GRID. THE GRID ALSO INDICATES AVERAGE AMERICAN HOUSEHOLD CONSUMPTION FOR 1975 AND 1995, AND THE PRESENT WORLD CONSUMPTION FOR PURPOSES OF COMPARISON WITH ONE'S BUDGET. (BP)

REPORT NUMBER: WIS-SG-74-409

AVAILABILITY: UNIVERSITY OF WISCONSIN SEA GRANT COLLEGE PROGRAM, 1800 UNIVERSITY AVENUE, MADISON, WISCONSIN 53706 (MARINE STUDIES CENTER CONTRIBUTION NO. 25, $0.10)

INSTITUTION NAME: WISCONSIN UNIV., MADISON. SEA GRANT PROGRAM.

ACCESSION NUMBER: ED123042

CLEARINGHOUSE ACCESSION NUMBER: SE019530

PROGRAM AREA: 95

PUBLICATION DATE: 75

TITLE: SOLID WASTE. (STUDENT RESOURCE BOOK V IN THE INVESTIGATING YOUR ENVIRONMENT PROGRAM).

INSTITUTION CODE: DUN06181

SPONSORING AGENCY CODE: BBB06621; RM066600

DESCRIPTOR: CRITICAL READING; ENERGY; *ENVIRONMENTAL EDUCATION; *INSTRUCTIONAL MATERIALS; *RESOURCE MATERIALS; SCIENCE COURSE IMPROVEMENT PROJECT; SCIENCE EDUCATION; SECONDARY EDUCATION; SECONDARY SCHOOL SCIENCE; *WASTE DISPOSAL; *WASTES; BIOLOGICAL SCIENCES CURRICULUM STUDY; BSCS

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS

DESCRIPTIVE NOTE: 57P.; FOR RELATED DOCUMENTS, SEE ED 116 901-902 AND SE 019 526-533

ISSUE: RIESEP76

ABSTRACT: THESE RESOURCE PAPERS ENCOURAGE THE STUDENT TO DISCOVER FOR HIMSELF THE CONTRIBUTIONS TO A PROBLEM MADE THROUGH ORIGINAL LITERATURE. SINCE SOME OF THE PAPERS ARE CONTROVERSIAL OR CONTRADICT OTHER PAPERS, THE STUDENT WILL NEED TO EVALUATE THEM TO DETERMINE HIS POSITION. IT IS HOPED THAT THESE PAPERS WILL ALSO FOSTER AN APPRECIATION OF THE WORK OF THE SCIENTISTS INVOLVED. THIS PUBLICATION BEGINS WITH AN ARTICLE THAT DEFINES SOLID WASTE AND EXPLAINS SOME MISUNDERSTANDINGS ABOUT WHAT CONSTITUTES A POLLUTANT. THE NEXT ARTICLE REVIEWS THE CURRENT STATUS OF TREATMENT AND DISPOSAL, AND THE THIRD PRESENTS SOME OF THE PROBLEMS

INVOLVED IN SOLID WASTE MANAGEMENT. THESE ARE FOLLOWED BY NINE PAPERS THAT EXAMINE THE RECLAIMING AND RECYCLING OF VARIOUS KINDS OF WASTES. THE FINAL THREE PAPERS DEAL WITH ENERGY USE. THE FIRST DESCRIBES EFFORTS TO CONSERVE ENERGY WHILE DISPOSING OF GARBAGE; THE NEXT TWO DISCUSS ASPECTS OF ENERGY AND RECYCLING. (LS)

AVAILABILITY: ADDISON-WESLEY PUBLISHING COMPANY, SOUTH STREET, READING, MASSACHUSETTS 01867 (CODE NUMBER 0937, $2.01 PLUS POSTAGE AND HANDLING)

INSTITUTION NAME: BIOLOGICAL SCIENCES CURRICULUM STUDY, BOULDER, COLO.

SPONSORING AGENCY NAME: NATIONAL INST. OF EDUCATION (DHEW), WASHINGTON, D.C.; OFFICE OF EDUCATION (DHEW), WASHINGTON, D.C.

ACCESSION NUMBER: ED123052

CLEARINGHOUSE ACCESSION NUMBER: SE019849

PUBLICATION DATE: OCT 73

TITLE: AMERICA'S ENERGY POTENTIAL: A SUMMARY AND EXPLANATION; COMMITTEE ON INTERIOR AND INSULAR AFFAIRS, U.S. HOUSE OF REPRESENTATIVES, NINETY-THIRD CONGRESS, FIRST SESSION. COMMITTEE PRINT .

PERSONAL AUTHOR: UDALL, MORRIS K.

INSTITUTION CODE: BBB11185

DESCRIPTOR: *CONSERVATION EDUCATION; DEPLETED RESOURCES; *ENERGY; ENVIRONMENTAL EDUCATION; *GOVERNMENT PUBLICATIONS; *INDUSTRIAL TECHNOLOGY; *NATURAL RESOURCES; ENERGY SOURCES; LEGISLATIVE REPORTS

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$1.67 PLUS POSTAGE

DESCRIPTIVE NOTE: 23P.; OCCASIONAL LIGHT TYPE

ISSUE: RIESEP76

ABSTRACT: THIS REPORT REVIEWS AMERICA'S CURRENT ENERGY POSITION. THE ENERGY SOURCES STUDIED INCLUDE OIL AND GAS, COAL, NUCLEAR ENERGY, SOLAR ENERGY, AND GEOTHERMAL ENERGY. EACH SOURCE IS ANALYZED IN TERMS OF CURRENT USE; TECHNOLOGY FOR EXTRACTING AND DEVELOPING THE ENERGY; RESEARCH AND DEVELOPMENT FUNDING; AND PROJECTIONS FOR FUTURE CONSUMPTION AND PRODUCTION. THE STUDY CONCLUDES THAT THE INABILITY OF DOMESTIC SOURCES TO MEET DEMANDS AND THE RISING DEPENDENCE ON FOREIGN SUPPLIES PREDICT THE END OF LOW-COST ENERGY. (MR)

INSTITUTION NAME: CONGRESS OF THE U.S., WASHINGTON, D.C. HOUSE COMMITTEE ON INTERIOR AND INSULAR AFFAIRS.

ACCESSION NUMBER: ED124356

CLEARINGHOUSE ACCESSION NUMBER: RC009458

PUBLICATION DATE: APR 76

TITLE: NAVAJO COAL: DEMANDS, ATTITUDES, AND ENVIRONMENT.

PERSONAL AUTHOR: GOODMAN, JAMES M.

DESCRIPTOR: *AMERICAN INDIANS; *CONSERVATION (ENVIRONMENT); CULTURAL BACKGROUND; *CULTURE CONFLICT; *ECONOMIC DEVELOPMENT; ENERGY; FUTURES (OF SOCIETY); LAND USE; LIVING STANDARDS; MIDDLE CLASS CULTURE; NATURAL RESOURCES; RELIGION; *RESERVATIONS (INDIAN); SPEECHES; VALUES; WATER RESOURCES; *NAVAJOS

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$1.67 PLUS POSTAGE.

DESCRIPTIVE NOTE: 10P.; PAPER PRESENTED AT WESTERN SOCIAL SCIENCE ASSOCIATION CONFERENCE (18TH, TEMPE, ARIZONA, APRIL 1976)

ISSUE: RIEOCT76

ABSTRACT: THE OPERATION OF SEVERAL COAL MINES WITH VAST PROVEN RESERVES ON THE NAVAJO RESERVATION IS A MANIFESTATION OF CONFLICT BETWEEN A POWER HUNGRY EXTERNAL WORLD; THE #RESERVATIONIST ATTITUDES OF TRADITIONAL NAVAJO CULTURE; THE DISADVANTAGED SOCIO-ECONOMIC STATUS OF THE AVERAGE NAVAJO WAGE EARNER; AND THE NAVAJO NATION'S LONG TERM NEEDS FOR INTERNAL DEVELOPMENT. THE NAVAJO ENVIRONMENT MUST BE CONSIDERED IN TERMS OF THE EXTERNAL (NON-INDIAN) DEMANDS FOR EXPANSION AND DIVERSIFICATION OF COAL PRODUCTION AND THE RELATED DEMANDS OF: MEAGER WATER SUPPLIES; THE NAVAJO'S EMOTIONAL/RELIGIOUS REACTION TO CURRENT AND PROPOSED EXPANSION OF COAL PRODUCTION; THE ENVIRONMENTAL IMPACT OF MINING ACTIVITIES; AND THE FUTURE NEEDS OF THE NAVAJO NATION. QUESTIONS PERTINENT TO THESE CONFLICTS ARE: (1) TO WHAT EXTENT DOES THE NON-RESERVATION WORLD DEPEND UPON NAVAJO COAL AND CAN THESE CONSUMING AREAS SURVIVE WITHOUT EXPANDED PRODUCTION? (2) WHAT IS THE MEANING OF MINING TO A SOCIETY WHICH IS TRADITIONALLY NOT ENTREPRENEURIAL AND WHAT EFFECT DOES STRIP MINING HAVE UPON THE NAVAJO'S RELIGION AND HIS SENSE OF PLACE AND BEING? (3) CAN THE ROYALTIES RECEIVED FROM COAL PRODUCTION SUSTAIN IMPROVEMENTS IN THE NAVAJO STANDARD OF LIVING OR SHOULD THE NAVAJO TRIBALIZE COAL PRODUCTION AND SEEK PROFITS AS WELL AS ROYALTIES? (JC)

ACCESSION NUMBER: ED124369

CLEARINGHOUSE ACCESSION NUMBER: RC009272

PUBLICATION DATE: 31 DEC 75

TITLE: 1975 ANNUAL REPORT OF THE APPALACHIAN REGIONAL COMMISSION.

PERSONAL AUTHOR: KENDRICK, ELISE F., ED.; AND OTHERS

INSTITUTION CODE: BBB00078

DESCRIPTOR: *ANNUAL REPORTS; CHILD DEVELOPMENT; COMMUNITY DEVELOPMENT; *DEVELOPMENTAL PROGRAMS; *ECONOMIC DEVELOPMENT; EDUCATION; EMPLOYMENT TRENDS; ENERGY; HEALTH; HOUSING; INCOME; MIGRATION; NATURAL RESOURCES; PLANNING; *POPULATION TRENDS; PUBLIC FACILITIES; *RURAL AREAS; TABLES (DATA); TRANSPORTATION; *APPALACHIA; *APPALACHIAN REGIONAL COMMISSION

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$7.35 PLUS POSTAGE.

DESCRIPTIVE NOTE: 131P.; COLOR-CODED MAPS ON PP. 15, 18-19, 30, AND 47 MAY NOT REPRODUCE CLEARLY

ISSUE: RIEOCT76

ABSTRACT: THE APPALACHIAN REGIONAL COMMISSION, CREATED VIA THE REGIONAL DEVELOPMENT ACT OF 1965, DOCUMENTS A DECADE OF CONTRIBUTIONS TO APPALACHIAN SOCIOECONOMIC DEVELOPMENT IN THIS 1975 ANNUAL REPORT. TOPICS COVERED IN THIS REPORT INCLUDE: THE TEN YEARS OF FOUNDATION BUILDING; THE REGION BEFORE 1965; THE REGION AND THE APPALACHIAN REGIONAL COMMISSION; POPULATION, EMPLOYMENT, AND INCOME; FINANCES; TRANSPORTATION; ENERGY, ENVIRONMENT, AND NATURAL RESOURCES; HEALTH AND CHILD DEVELOPMENT; EDUCATION; COMMUNITY DEVELOPMENT AND HOUSING; SUPPLEMENTAL GRANTS; RESEARCH AND PLANNING. CITED AS SOME OF THE REGION'S MORE NOTEWORTHY ACCOMPLISHMENTS DURING THE PAST DECADE ARE: (1) A SHIFT FROM OUT-MIGRATION TO IN-MIGRATION WITH AN AVERAGE ANNUAL IN-MIGRATION OF CLOSE TO 66,000 PEOPLE DURING THE PAST 5 YEARS; (2) A 41% DECLINE IN POVERTY LEVEL INCOMES BETWEEN 1960 AND 1970; (3) A GAIN OF MORE THAN ONE MILLION JOBS BETWEEN 1965 AND 1973; (4) A RISE IN PER CAPITA INCOME (FROM 78% OF THE NATIONAL AVERAGE IN 1965 TO 81% IN 1973); (5) A 10% INCREASE IN THE NUMBER OF ADULTS WHO HAD FINISHED HIGH SCHOOL (1960-70); (6) AN INCREASE IN THE AVERAGE NUMBER OF PHYSICIANS PER 100,000 RESIDENTS (92 PHYSICIANS PER 100,000 IN 1963 AND 100 PHYSICIANS PER 100,000 IN 1971). THE APPENDICES DESCRIBE PROJECTS FOR 1976 AND NAME THE LOCAL DEVELOPMENT DISTRICTS. (JC)

INSTITUTION NAME: APPALACHIAN REGIONAL COMMISSION, WASHINGTON, D.C.

ACCESSION NUMBER: ED124387

CLEARINGHOUSE ACCESSION NUMBER: SE019610

PROGRAM AREA: 88

PUBLICATION DATE: 74

TITLE: NUCLEAR ENERGY MINICOURSE, CAREER ORIENTED PRE-TECHNICAL PHYSICS.

INSTITUTION CODE: XPT83331

SPONSORING AGENCY CODE: BBB00077

DESCRIPTOR: ENERGY; INSTRUCTIONAL MATERIALS; *NUCLEAR PHYSICS; PHYSICS; *PROGRAM GUIDES; *SCIENCE ACTIVITIES; SCIENCE CAREERS; SCIENCE EDUCATION; *SCIENCE MATERIALS; SECONDARY EDUCATION; *SECONDARY SCHOOL SCIENCE; TECHNICAL EDUCATION; ELEMENTARY SECONDARY EDUCATION ACT TITLE III; ESEA TITLE III

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$2.06 PLUS POSTAGE.

DESCRIPTIVE NOTE: 41P.; CONTAINS SMALL PRINT IN CHARTS AND GRAPHS; FOR RELATED DOCUMENTS, SEE SE 018 322-333 AND SE 019 605-616

ISSUE: RIEOCT76

ABSTRACT: THIS INSTRUCTIONAL GUIDE, INTENDED FOR STUDENT USE, DEVELOPS THE CONCEPT OF NUCLEAR ENERGY THROUGH A SERIES OF SEQUENTIAL ACTIVITIES. A TECHNICAL DEVELOPMENT OF THE SUBJECT IS PURSUED WITH EXAMPLES STRESSING PRACTICAL ASPECTS OF THE CONCEPTS. INCLUDED IN THE MINICOURSE ARE: (1) THE RATIONALE, (2) TERMINAL BEHAVIORAL OBJECTIVES, (3) ENABLING BEHAVIORAL OBJECTIVES, (4) ACTIVITIES, (5) RESOURCE PACKAGES, AND (6) EVALUATION MATERIALS. FOLLOWING A DEVELOPMENT OF ATOMIC STRUCTURE, RADIATION DETECTION AND SAFETY ARE CONSIDERED. THIS UNIT IS ONE OF TWELVE INTENDED FOR USE IN THE SECOND YEAR OF A TWO YEAR VOCATIONALLY ORIENTED PHYSICS PROGRAM. (CP)

INSTITUTION NAME: DALLAS INDEPENDENT SCHOOL DISTRICT, TEX.

SPONSORING AGENCY NAME: BUREAU OF ELEMENTARY AND SECONDARY EDUCATION (DHEW/OE), WASHINGTON, D.C.

ACCESSION NUMBER: ED124395

CLEARINGHOUSE ACCESSION NUMBER: SE019851

PUBLICATION DATE: AUG 75

TITLE: ENERGY FACTS II; COMMITTEE ON SCIENCE AND TECHNOLOGY, HOUSE OF REPRESENTATIVES, NINETY-FOURTH CONGRESS, FIRST SESSION. COMMITTEE PRINT .

INSTITUTION CODE: BBB05642

DESCRIPTOR: COMPARATIVE STATISTICS; *ECONOMIC RESEARCH; *ENERGY; *FUELS; *GRAPHS; NATURAL RESOURCES; STATISTICAL DATA; *TABLES (DATA)

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 473P.; NOT AVAILABLE IN HARD COPY DUE TO MARGINAL LEGIBILITY OF ORIGINAL DOCUMENT

ISSUE: RIEOCT76

ABSTRACT: THIS HANDBOOK CONTAINS A COMPREHENSIVE SELECTION OF ENERGY STATISTICS. THE FIRST SECTION CONTAINS INFORMATION ON UNITED STATES AND FOREIGN ENERGY INCLUDING RESOURCES, PRODUCTION, CONSUMPTION AND DEMAND, ENERGY AND GROSS NATIONAL PRODUCT, ENERGY RESEARCH AND DEVELOPMENT, AND MISCELLANEOUS DATA. THE REMAINING SECTIONS CONTAIN DATA ON ENERGY SOURCES SUCH AS COAL, GAS, NUCLEAR POWER, OIL, URANIUM, AND SOLAR ENERGY. ENERGY SOURCE DATA COVER DOMESTIC RESERVES, PRODUCTION AND DEMAND, PRICES, DRILLING AND REFINING, STORAGE AND TRANSMISSION, AND SHIPPING. ALL SOURCES OF THE TABLES AND GRAPHS ARE LISTED AND REFERENCED. THE APPENDICES INCLUDE A GLOSSARY OF ENERGY RELATED TERMS, A

DEFINITION OF ENERGY UNITS, A LIST OF ABBREVIATIONS, AND A TABLE OF CONVERSION FACTORS. (MR)

AVAILABILITY: SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON, D.C. 20402 ($4.55)

INSTITUTION NAME: LIBRARY OF CONGRESS, WASHINGTON, D.C. CONGRESSIONAL RESEARCH SERVICE.

ACCESSION NUMBER: ED124426

CLEARINGHOUSE ACCESSION NUMBER: SE020985

PUBLICATION DATE: 76

TITLE: NATIONAL ENERGY OUTLOOK: 1976 EXECUTIVE SUMMARY.

INSTITUTION CODE: 88812650

DESCRIPTOR: ECONOMIC DEVELOPMENT; ECONOMIC FACTORS; *ENERGY; ENVIRONMENT; *FUEL CONSUMPTION; *FUELS; *PREDICTION; *RESEARCH; UTILITIES

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 17P.; THE 1976 NATIONAL ENERGY OUTLOOK, OF WHICH THIS EXECUTIVE SUMMARY IS A PART IS FOR SALE BY THE SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON, D.C. 20402 (STOCK NO. 041-018-00097-4; $7.30); NOT AVAILABLE IN HARD COPY DUE TO COLOR-CODED CHARTS AND GRAPHS

ISSUE: RIEOCT76

ABSTRACT: THIS BROCHURE BEGINS WITH FINDINGS AND CONCLUSIONS OF THE 1975 NATIONAL ENERGY OUTLOOK. DISCUSSIONS OF NATIONAL ENERGY TOPICS FOLLOW, INCLUDING: WHAT ARE THE ROOTS OF OUR ENERGY PROBLEM? HOW DID WE BECOME SO VULNERABLE TO OIL IMPORTS?; HOW MUCH ENERGY WILL THE NATION CONSUME?; HOW WILL THE NATIONAL MEET ITS GROWING ENERGY DEMANDS BY 1985; HOW MUCH ENERGY CAN BE SAVED; WHAT WILL OIL IMPORTS BE BY 1985; WHERE WILL NEW OIL SUPPLIES COME FROM?; HOW DO RESERVES AFFECT DOMESTIC PRODUCTION?; WILL NATURAL GAS PRODUCTION CONTINUE TO DECLINE?; WHERE WILL NEW COAL PRODUCTION COME FROM?; WHAT WILL BE THE SOURCES OF ELECTRICITY IN THE FUTURE?; HOW MUCH CAN NEW TECHNOLOGIES CONTRIBUTE?; AND HOW MUCH WILL ENERGY SUPPLY INVESTMENT COST? EACH ONE-PAGE DISCUSSION INCLUDES DEPICTION OF THE PERTINENT FACTS VIA MULTICOLORED GRAPHS. (RE)

REPORT NUMBER: FEA/N-76/100

AVAILABILITY: SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON, D.C. 20402 (STOCK NO. 041-018-00102-4, $0.60; MINIMUM CHARGE OF $1.00 FOR EACH MAIL ORDER)

INSTITUTION NAME: FEDERAL ENERGY ADMINISTRATION, WASHINGTON, D.C.

ACCESSION NUMBER: ED125071

CLEARINGHOUSE ACCESSION NUMBER: EA008397

PUBLICATION DATE: 76

TITLE: GUIDE FOR PLANNING EDUCATIONAL FACILITIES. AN AUTHORITATIVE AND COMPREHENSIVE GUIDE TO THE PLANNING OF EDUCATIONAL FACILITIES FROM THE CONCEPTION OF NEED THROUGH THE UTILIZATION OF THE FACILITY. FIFTH EDITION.

INSTITUTION CODE: RUF19769

DESCRIPTOR: ARCHITECTS; CLASSROOM FURNITURE; EDUCATIONAL EQUIPMENT; *EDUCATIONAL FACILITIES; EDUCATIONAL FINANCE; *EDUCATIONAL PLANNING; ENERGY CONSERVATION; ENVIRONMENTAL CRITERIA; FACILITY CASE STUDIES; *FACILITY GUIDELINES; FACILITY INVENTORY; FACILITY PLANNING; *FACILITY REQUIREMENTS; *SCHOOL CONSTRUCTION; SCHOOL DESIGN; SCHOOL IMPROVEMENT; SCHOOL SPACE; SITE SELECTION

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 188P.; FOR A RELATED DOCUMENT, SEE ED 043 958

ISSUE: RIENOV76

ABSTRACT: THE FIFTH EDITION OF THE GUIDE IS A REFERENCE WORK COVERING ALL PHASES OF PLANNING, DESIGN, CONSTRUCTION, AND RENOVATION OF EDUCATIONAL FACILITIES. THE LOOSE-LEAF FORMAT IS ILLUSTRATED WITH NUMEROUS DIAGRAMS AND PHOTOGRAPHS AND IS DESIGNED TO HOLD ADDITIONAL UNITS OR REVISIONS. A BRIEF SUMMARY OF SCHOOL BUILDING DESIGN IN THE UNITED STATES AND AN OVERVIEW OF VARIOUS SOURCES OF ASSISTANCE AND GUIDANCE FOR PLANNERS ARE FOLLOWED BY NON-TO INFORMATION ON (1) EDUCATIONAL FACILITIES SURVEY, (2) SELECTION AND RESPONSIBILITIES OF THE ARCHITECT, (3) ESTABLISHING EDUCATIONAL SPECIFICATIONS, (4) SITE SELECTION AND DEVELOPMENT, (5) REQUIREMENTS FOR LEARNING AND AUXILIARY SPACES, (6) ENVIRONMENTAL CONSIDERATIONS, (7) FURNITURE AND EQUIPMENT, (8) CONTROLLING COSTS, (9) BUDGETING AND FINANCING, (10) THE CONSTRUCTION PROGRAM, (11) FACILITY RENOVATION, AND (12) ORIENTATION AND EVALUATION. AN INDEX IS INCLUDED. (MLP)

AVAILABILITY: COUNCIL OF EDUCATIONAL FACILITY PLANNERS, INTERNATIONAL, 29 WEST WOODRUFF AVENUE, COLUMBUS, OHIO 43210 ($15.00)

INSTITUTION NAME: COUNCIL OF EDUCATIONAL FACILITY PLANNERS, COLUMBUS, OHIO.

ACCESSION NUMBER: ED125076

CLEARINGHOUSE ACCESSION NUMBER: EA008402

PUBLICATION DATE: 76

TITLE: TO RE-CREATE A SCHOOL BUILDING. "SURPLUS" SPACE, ENERGY AND OTHER CHALLENGES.

INSTITUTION CODE: PGK01610

DESCRIPTOR: ADMINISTRATOR GUIDES; *BUILDING CONVERSION; BUILDING OBSOLESCENCE; ELEMENTARY SECONDARY EDUCATION; *ENERGY CONSERVATION; *ENROLLMENT TRENDS; FACILITY CASE STUDIES; NEEDS ASSESSMENT; OPEN PLAN SCHOOLS; PRESERVATION; *SCHOOL CLOSING; SCHOOL COMMUNITY RELATIONSHIP; SCHOOL DEMOGRAPHY; *SCHOOL IMPROVEMENT; SCHOOL PLANNING; SHARED FACILITIES; SPACE UTILIZATION; *DECLINING ENROLLMENTS

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 216P.; PHOTOS MAY REPRODUCE POORLY

ISSUE: RIENOV76

ABSTRACT: SCHOOL ADMINISTRATORS CONFRONTED WITH THE POSSIBILITY OF HAVING TO CLOSE A SCHOOL NEED TO INFORM THE PUBLIC, ASSESS COMMUNITY ATTITUDES AND NEEDS, AND IDENTIFY THE BEST POSSIBLE USE OF THE BUILDINGS. EXISTING SCHOOLS MUST BE REEXAMINED IN LIGHT OF THE NEW NEED TO CONSERVE ENERGY AND REDUCE OPERATING COSTS. MEASURES THAT REDUCE ENERGY CONSUMPTION CAN BE TAKEN AND, IF NECESSARY, SCHOOLS CAN BE REMODELED. THE MOTIVATION FOR MODERNIZATION IS NOW UPGRADING THE ENVIRONMENT AND REMODELING SPACE FOR CHANGE IN THE EDUCATIONAL PROGRAM, PLUS PHASING OUT BUILDINGS THAT HAVE OUTLASTED THEIR USEFULNESS. FOR SCHOOLS OVER 100 YEARS OLD, HISTORIC PRESERVATION CAN OFTEN RESTORE AND ADAPT THEM TO NEW NEEDS. THIRTY-FIVE SUCCESSFUL EXAMPLES OF UPGRADING EXISTING FACILITIES AND, IN SOME CASES, CHANGING THEIR FUNCTION ARE DOCUMENTED IN PHOTOGRAPHS AND FLOOR PLANS. (MLP)

AVAILABILITY: AMERICAN ASSOCIATION OF SCHOOL ADMINISTRATORS, 1801 NORTH MOORE STREET, ARLINGTON, VIRGINIA 22209 (STOCK NO. 201-00452; $10.00, QUANTITY DISCOUNTS; PAYMENT MUST ACCOMPANY ALL ORDERS LESS THAN $15.00)

INSTITUTION NAME: AMERICAN ASSOCIATION OF SCHOOL ADMINISTRATORS, WASHINGTON, D.C.

ACCESSION NUMBER: ED125099

CLEARINGHOUSE ACCESSION NUMBER: EA008425

PROGRAM AREA: 95

PUBLICATION DATE: AUG 76

TITLE: ENERGY CONSERVATION. THE BEST OF ERIC, NUMBER 19.

INSTITUTION CODE: SJJ69850

SPONSORING AGENCY CODE: 88806021

DESCRIPTOR: AIR CONDITIONING; *BUILDING DESIGN; *BUILDING OPERATION; *CLIMATE CONTROL; *EDUCATIONAL FINANCE; ELEMENTARY SECONDARY EDUCATION; *ENERGY CONSERVATION; FUEL CONSUMPTION; HEATING; LIGHTING; SCHOOL BUILDINGS; SOLAR RADIATION; TEMPERATURE; UTILITIES; VENTILATION

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$1.67 PLUS POSTAGE.

DESCRIPTIVE NOTE: 9P.

ISSUE: RIENOV76

ABSTRACT: THE 13 ARTICLES IN THIS ANNOTATED BIBLIOGRAPHY COVER A WIDE RANGE OF CONCERNS FROM THE FINANCES OF ENERGY CONSERVATION TO SOLAR ENERGY APPLICATIONS, TO BUILDING DESIGN, TO BUILDING MAINTENANCE, AND TO THE ROLE OF THE SCIENCE TEACHER AS AN ENERGY ANALYST AND ACTIVIST. (IRT)

CONTRACT NUMBER: OEC-0-8-080353-3514

AVAILABILITY: ERIC CLEARINGHOUSE ON EDUCATIONAL MANAGEMENT, UNIVERSITY OF OREGON, EUGENE, OREGON 97403 (FREE)

INSTITUTION NAME: OREGON UNIV., EUGENE. ERIC CLEARINGHOUSE ON EDUCATIONAL MANAGEMENT.

SPONSORING AGENCY NAME: NATIONAL INST. OF EDUCATION (DHEW), WASHINGTON, D.C.

ACCESSION NUMBER: ED125703

CLEARINGHOUSE ACCESSION NUMBER: JC760378

PUBLICATION DATE: JUL 76

TITLE: ENERGY-RELATED TECHNOLOGY PROGRAMS IN COMMUNITY AND JUNIOR COLLEGES: AN ANALYSIS OF EXISTING AND PLANNED PROGRAMS.

PERSONAL AUTHOR: DOGGETTE, JOHN R.

INSTITUTION CODE: 88810571

SPONSORING AGENCY CODE: 88807317; 88813149

DESCRIPTOR: COMMUNITY COLLEGES; *ENERGY; *ENERGY CONSERVATION; ENROLLMENT TRENDS; *INDUSTRIAL TECHNOLOGY; *JUNIOR COLLEGES; MANPOWER NEEDS; NATIONAL SURVEYS; *SCHOOL INDUSTRY RELATIONSHIP; STATE OF THE ART REVIEWS; *TECHNICAL EDUCATION; TECHNICAL OCCUPATIONS; *ENERGY TECHNOLOGY

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$2.06 PLUS POSTAGE.

DESCRIPTIVE NOTE: 38P.

ISSUE: RIENOV76

ABSTRACT: THIS STUDY WAS CONDUCTED TO PROVIDE A BASIS FOR PLANNING FOR NEEDED ENERGY-RELATED OCCUPATIONAL TECHNOLOGY PROGRAMS IN TWO-YEAR EDUCATIONAL INSTITUTIONS. A QUESTIONNAIRE WAS SENT TO 1,152 JUNIOR, COMMUNITY, AND TECHNICAL COLLEGES IN FALL 1975; 774 (67%) RESPONDED. THE SURVEY IDENTIFIED 62 EXISTING ONE- AND TWO-YEAR ENERGY-RELATED PROGRAMS AND 132 PLANNED PROGRAMS, AND FOUND THAT PUBLIC INSTITUTIONS ARE SIGNIFICANTLY MORE INVOLVED IN ENERGY-RELATED TECHNOLOGY THAN ARE PRIVATE INSTITUTIONS. THIS DOCUMENT REPORTS ON: (1) THE NUMBER OF EXISTING AND PLANNED PROGRAMS IN PETROLEUM TECHNOLOGY, COAL-MINING

TECHNOLOGY, NUCLEAR ENERGY TECHNOLOGY, SOLAR ENERGY TECHNOLOGY, LASER-OPTICS TECHNOLOGY, GEOTHERMAL ENERGY TECHNOLOGY; ALTERNATIVE ENERGY SOURCES, ENERGY CONSERVATION, AND ELECTRICAL ENERGY TECHNOLOGY. (2) THE NUMBER OF SUCH PROGRAMS IN VARIOUS GEOGRAPHICAL AREAS AND AT VARIOUS KINDS OF INSTITUTIONS; (3) THE CURRENT AND ANTICIPATED ENROLLMENTS IN SUCH PROGRAMS; (4) THE NUMBER OF STUDENTS WHO HAVE ALREADY GRADUATED FROM SUCH PROGRAMS; (5) THE DEGREE AND TYPE OF COOPERATION BETWEEN THE COLLEGES AND ENERGY INDUSTRIES; AND (6) THE DEGREE OF COLLEGE INTEREST IN ATTENDING A WORKING CONFERENCE TO ASSESS OCCUPATIONAL NEEDS IN ENERGY AREAS. A DESCRIPTION OF THE RESEARCH METHODOLOGY IS INCLUDED, AS ARE THE SURVEY INSTRUMENT AND A LIST OF THE INSTITUTIONS HAVING EXISTING ENERGY PROGRAMS. (DC)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, SPRINGFIELD, VIRGINIA 22161 (MF $2.25, HC $4.00)

INSTITUTION NAME: OAK RIDGE ASSOCIATED UNIVERSITIES, TENN. MANPOWER DEVELOPMENT DIV.

SPONSORING AGENCY NAME: AMERICAN ASSOCIATION OF COMMUNITY AND JUNIOR COLLEGES, WASHINGTON, D.C.; ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION, WASHINGTON, D.C. DIV. OF LABOR RELATIONS.

ACCESSION NUMBER: ED125849

CLEARINGHOUSE ACCESSION NUMBER: SE018999

PUBLICATION DATE: 74

TITLE: U.S. ENERGY PROSPECTS: AN ENGINEERING VIEWPOINT.

INSTITUTION CODE: BBB05423

DESCRIPTOR: CONSERVATION (ENVIRONMENT); CONSERVATION EDUCATION; DEPLETED RESOURCES; *ECOLOGICAL FACTORS; *ENERGY; *ENERGY CONSERVATION; ENGINEERING; *ENVIRONMENTAL EDUCATION; FUEL CONSUMPTION; *NATURAL RESOURCES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$7.35 PLUS POSTAGE.

DESCRIPTIVE NOTE: 149P.; PREPARED BY THE TASK FORCE ON ENERGY

ISSUE: RIENOV76

ABSTRACT: WITH THE ARAB OIL EMBARGO OF 1973, THE UNITED STATES BECAME AWARE OF ITS DEPENDENCE ON FOREIGN FUEL TO MAINTAIN ITS PRODUCTIVE CAPACITY, EMPLOYMENT BASE, POLITICAL AUTONOMY, STRATEGIC SECURITY, AND LIVING STANDARD. AN ENGINEERING TASK FORCE ON ENERGY WAS APPOINTED TO PROVIDE AN INFORMED ASSESSMENT OF THE REALISTIC STRATEGIES THAT COULD BE INITIATED IF THE UNITED STATES CHOSE TO BECOME AS INDEPENDENT AS POSSIBLE OF FOREIGN SOURCES BY 1985, BASED ON TECHNOLOGY NOW KNOWN OR APPLICABLE BY THAT DATE. THIS PUBLICATION PRESENTS THE ANALYSIS, FINDINGS, AND CONCLUSIONS OF THAT TASK FORCE. THE TASK FORCE CONCLUDES THAT THE ACHIEVEMENT OF ENERGY SELF-SUFFICIENCY IN ONE DECADE WOULD REQUIRE ENORMOUS EFFORTS INCLUDING VOLUNTARY REDUCTION OF ENERGY CONSUMPTION AND DEVELOPMENT OF AVAILABLE FUEL RESOURCES. CENTRAL TO THIS REPORT ARE THE ROLES OF GOVERNMENT, INDUSTRY, AND THE PUBLIC IN ADVANCING A COMPREHENSIVE ENERGY PROGRAM IN THE NEXT DECADE. SPECIFIC CONSIDERATIONS DISCUSSED IN THE REPORT INCLUDE SUPPLY AND DEMAND, CONSERVATION POTENTIALS, OIL AND GAS, SHALE OIL, COAL SUPPLY, AND ELECTRICITY PROSPECTS, PROGRAM CONSTRAINTS AND RESPONSIBILITIES BEYOND 1985. (AUTHOR/MA)

AVAILABILITY: PRINTING AND PUBLISHING OFFICE, NATIONAL ACADEMY OF SCIENCES, 2101 CONSTITUTION AVENUE, N.W., WASHINGTON, D.C. 20418 (ISBN-0-309-02237-1, $5.75)

INSTITUTION NAME: NATIONAL ACADEMY OF ENGINEERING, WASHINGTON, D.C. COMMISSION ON EDUCATION.

ACCESSION NUMBER: ED125850

CLEARINGHOUSE ACCESSION NUMBER: SE019000

PUBLICATION DATE: SEP 74

TITLE: NATIONAL CHURCH PANEL ON STRIP MINING AND THE ENERGY CRISIS (CLINCH VALLEY COLLEGE, WISE, VIRGINIA, MARCH 14-16, 1974).

DESCRIPTOR: COMMUNITY INVOLVEMENT; CONSERVATION (ENVIRONMENT); DEPLETED RESOURCES; ECOLOGICAL FACTORS; ENERGY; *ENVIRONMENT; *LAND USE; *NATURAL RESOURCES; RELIGION; *SOCIAL RESPONSIBILITY; VIRGINIA (WISE)

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 80P.

ISSUE: RIENOV76

ABSTRACT: THIS REPORT OF THE NATIONAL CHURCH PANEL IS DESIGNED TO ASSIST CHURCHES AND OTHER INSTITUTIONS AND INDIVIDUALS IN RECOGNIZING THE CURRENT AND FUTURE ISSUES OF NATIONAL ENERGY POLICY, AS IT RELATES TO GOVERNMENT AND CORPORATIONS. THE REPORT IS BASED ON PUBLIC HEARINGS ON STRIP MINING AND THE ENERGY CRISIS HELD AT CLINCH VALLEY COLLEGE, WISE, VIRGINIA. FIFTEEN CHURCH LEADERS COMPRISED THE PANEL OF EXAMINERS. THE HEARINGS WERE HELD TO DETERMINE THE ROLE AND RESPONSIBILITY OF CHURCHES ON THE NATIONAL LEVEL IN RESPONSE TO THE ISSUES OF SOCIAL AND ECONOMIC JUSTICE AND ENVIRONMENTAL DAMAGE RAISED BY THE WIDESPREAD PRACTICE OF STRIP MINING FOR COAL IN THIS COUNTRY. TO ACCOMPLISH ITS PURPOSE, THE PANEL SOUGHT THE VIEWS OF COMPANIES CONDUCTING STRIP MINING, STRIP MINE OPERATORS AND TRADE ASSOCIATION REPRESENTATIVES, GOVERNMENT AGENCIES INVOLVED IN COAL PURCHASES, PUBLIC INTEREST AND ENVIRONMENTAL GROUPS CONCERNED ABOUT STRIP MINING, AND ORGANIZATIONS AND PERSONS FROM APPALACHIA AND THE WEST AFFECTED BY STRIP MINING PRACTICES. THE PANEL'S REPORT CONTAINS A PREFACE ON THE IMPORTANCE OF THE ISSUES, A STATEMENT OF THEOLOGY ON THE REASONS CHURCHES ARE CONCERNED, SELECTED EXCERPTS AND TESTIMONY, AND A SUMMARY OF THE PANEL'S FINDINGS AND RECOMMENDATIONS. A PARTIALLY ANNOTATED LIST OF RESOURCE MATERIALS IS INCLUDED. (AUTHOR/MA)

AVAILABILITY: INTERFAITH CENTER ON CORPORATE RESPONSIBILITY, ROOM 566, 475 RIVERSIDE DRIVE, NEW YORK, N.Y. 10027 ($2.00)

ACCESSION NUMBER: ED125858

CLEARINGHOUSE ACCESSION NUMBER: SE019348

PUBLICATION DATE: OCT 73

TITLE: LIVING LIGHTLY: ENERGY CONSERVATION IN HOUSING.

PERSONAL AUTHOR: BENDER, TOM

DESCRIPTOR: *ARCHITECTURE; *DEPLETED RESOURCES; ENERGY; *ENERGY CONSERVATION; ENVIRONMENT; FUEL CONSUMPTION; *HOUSING; *NATURAL RESOURCES

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 38P.; MARGINAL LEGIBILITY THROUGHOUT

ISSUE: RIENOV76

ABSTRACT: THIS PUBLICATION CONTAINS A SERIES OF PAPERS WHICH PROMOTE THE CONCEPTS OF ENERGY CONSERVATION AND OFFER SAFE AND CONVENIENT WAYS OF HANDLING ALL ASPECTS OF OUR LIVES AFFECTED BY ENERGY WITHOUT HAVING TO DEPEND IN ANY WAY ON FOSSIL FUELS OR NUCLEAR POWER. THESE CHANGES, WHICH CAN BE BROUGHT ABOUT IN HOMES AND IN ENERGY FLOWS AFFECTED BY THE INDIVIDUAL, CAN REDUCE THE ENERGY CONSUMPTION OF OUR SOCIETY BY 90%. AMONG THE TOPICS DISCUSSED ARE: MEANS OF MINIMIZING HEAT LOSS IN HOUSES, COOLING, FOOD STORAGE AND COOKING, WATER CONSERVATION, WASTES, HOME STRUCTURE AND FURNISHINGS, LIGHTING, SOD ROOFING, THE UTILIZATION OF WOOD AS FUEL, AND OUR SOROS (AN EXPERIMENTAL HOUSE DESIGNED AND CONSTRUCTED BY AN ENVIRONMENTAL DESIGN CLASS AT THE UNIVERSITY OF MINNESOTA). (BT)

ACCESSION NUMBER: ED125859

CLEARINGHOUSE ACCESSION NUMBER: SE019349

PUBLICATION DATE: FEB 75

TITLE: SHARING SMALLER PIES.

PERSONAL AUTHOR: BENDER, TOM

DESCRIPTOR: *CONSERVATION (ENVIRONMENT); DEMOGRAPHY; *DEPLETED RESOURCES; *ECONOMIC CHANGE; ENERGY CONSERVATION; ENVIRONMENTAL INFLUENCES; *NATURAL RESOURCES; *SOCIAL CHANGE; TECHNOLOGY; *VALUES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$2.06 PLUS POSTAGE.

DESCRIPTIVE NOTE: 40P.; SHADED DRAWINGS MAY NOT REPRODUCE WELL

ISSUE: RIENOV76

ABSTRACT: THIS PAPER DETAILS THE UNFAVORABLE PREDICAMENT OF THE UNITED STATES AS A CONSEQUENCE OF USING MUCH OF ITS OWN NON-RENEWABLE MATERIAL AND ENERGY RESOURCES. AS A CONSEQUENCE, THE UNITED STATES WILL SOON BE SUBJECT TO THE POLITICAL AND ECONOMIC CONDITIONS IMPOSED UPON IT BY OTHER NATIONS. THE UNITED STATES MUST BEGIN TO IMPLEMENT ADJUSTMENTS TO THE NEW RESOURCE REALITIES. FUNDAMENTAL CHANGES IN AMERICAN INSTITUTIONS ARE NECESSARY AND CAN OFFER THE QUICKEST, LONGEST LASTING, AND MOST EFFECTIVE WAYS TO MOVE TO A MORE VIABLE QUALITY OF LIFE. OLD PROBLEMS THAT THE UNITED STATES HAS LONG IGNORED, SUCH AS POPULATION, TRADE, EQUITY, AND RESOURCES, ARE DISCUSSED. THE VALUES, ALTERNATIVE TECHNOLOGIES, PROFESSIONAL SERVICES, AND CHANGES NECESSARY TO DEVELOP A CULTURE THAT CAN ENSURE ARE DETAILED. A LIST OF ADDITIONAL RELEVANT SOURCES IS INCLUDED. (BT)

AVAILABILITY: TOM BENDER, 760 VISTA AVENUE, S.E., SALEM, OREGON 97302 ($1.50)

ACCESSION NUMBER: ED125860

CLEARINGHOUSE ACCESSION NUMBER: SE019534

PUBLICATION DATE: 75

TITLE: MINERAL RESOURCES AND THE ENVIRONMENT.

INSTITUTION CODE: BBB01389

SPONSORING AGENCY CODE: BBB03554; FGK21460; FGK57295

DESCRIPTOR: *CONSERVATION (ENVIRONMENT); *ECONOMIC FACTORS; ENERGY; *ENVIRONMENT; *FUELS; *NATURAL RESOURCES; POLICY FORMATION; PUBLIC HEALTH; RESOURCE ALLOCATIONS; TECHNOLOGY; *MINERALS

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$19.41 PLUS POSTAGE.

DESCRIPTIVE NOTE: 362P.

ISSUE: RIENOV76

ABSTRACT: THIS REPORT PRESENTS THE FINDINGS AND RECOMMENDATIONS OF PANELS CREATED BY THE COMMITTEE ON MINERAL RESOURCES AND THE ENVIRONMENT (COMRATE) TO STUDY FOUR TOPIC AREAS OF MINERAL RESOURCES AND THE ENVIRONMENT. THE TOPIC AREAS STUDIED BY THE PANELS WERE: TECHNOLOGY, SUPPLY, THE ENVIRONMENT, AND DEMAND. SECTION I, THE REPORT OF THE TECHNOLOGY PANEL, IS A BROAD COVERAGE OF THE ENTIRE AREA UNDER CONSIDERATION. THE PANEL PRESENTED AN OVERVIEW SUMMARY OF THE LARGE BODY OF CONTRIBUTED ESSAYS ON SPECIFIC ASPECTS OF THE TOPIC. SECTIONS II AND III, THE REPORTS OF THE SUPPLY AND ENVIRONMENT PANELS, ARE CASE STUDIES. SECTION II DISCUSSES SUPPLIES OF THE FOSSIL FUELS AND OF COPPER AS MAJOR REPRESENTATIVES OF TWO CATEGORIES OF MINERAL RESOURCES. FOR SECTION III, COAL WAS SELECTED FOR EXCLUSIVE STUDY. SECTION IV, THE REPORT OF THE DEMAND PANEL, SETS THE SPECIFIC QUESTIONS OF TECHNOLOGY, SUPPLY, AND ENVIRONMENT ADDRESSED IN THE PRECEDING SECTIONS IN THE LARGER SOCIO-ECONOMIC PERSPECTIVE OF DEMAND FOR ENERGY, AND OF THE IMPLICATIONS OF DEMAND FORECASTING FOR BOTH SUPPLY AND

DEMAND FOR MINERALS. ALL FOUR SECTIONS ARE AUGMENTED BY SEPARATE APPENDIX VOLUMES. (BT)

REPORT NUMBER: ISBN-0-309-02343-2

AVAILABILITY: PRINTING AND PUBLISHING OFFICE, NATIONAL ACADEMY OF SCIENCES, 2101 CONSTITUTION AVENUE, N.W., WASHINGTON, D.C. 20418 ($6.00)

INSTITUTION NAME: NATIONAL ACADEMY OF SCIENCES, WASHINGTON, D.C.

SPONSORING AGENCY NAME: DEPARTMENT OF THE INTERIOR, WASHINGTON, D.C.; NATIONAL SCIENCE FOUNDATION, WASHINGTON, D.C.; POPULATION COUNCIL, NEW YORK, N.Y.

ACCESSION NUMBER: ED125863

CLEARINGHOUSE ACCESSION NUMBER: SE019848

PUBLICATION DATE: 74

TITLE: CITIZEN ACTION GUIDE TO ENERGY CONSERVATION.

INSTITUTION CODE: BBB04463

DESCRIPTOR: *CITIZEN PARTICIPATION; *CONSERVATION EDUCATION; DEPLETED RESOURCES; ENERGY; *ENERGY CONSERVATION; *ENVIRONMENTAL EDUCATION; FUEL CONSUMPTION; NATURAL RESOURCES; *RESOURCE GUIDES; SOCIAL ACTION

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$3.50 PLUS POSTAGE.

DESCRIPTIVE NOTE: 67P.

ISSUE: RIENOV76

ABSTRACT: THIS BOOK IS CONCERNED WITH EDUCATING CITIZEN LEADERS AND PUBLIC OFFICIALS ON MATTERS OF TRANSPORTATION ENERGY, INDUSTRIAL AND ELECTRICAL ENERGY, AND RESIDENTIAL AND COMMERCIAL ENERGY USAGE. ALSO INCLUDED ARE GUIDELINES ON DEVELOPING A NATIONAL ENERGY CONSERVATION POLICY AND MOBILIZING CITIZENS FOR ACTION IN ENERGY CONSERVATION CONCERNS. A GLOSSARY OF TERMS, A SHORT BIBLIOGRAPHY, AND A LISTING OF PREVIOUS ENERGY PUBLICATIONS ARE AT THE END OF THE BOOK. (MA)

AVAILABILITY: SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON, D.C. 20402 (STOCK NUMBER 4000-00360, $1.75; DISCOUNTS OF 25% ON ORDERS OF 100 OR MORE COPIES)

INSTITUTION NAME: CITIZENS ADVISORY COMMITTEE ON ENVIRONMENTAL QUALITY.

ACCESSION NUMBER: ED125865

CLEARINGHOUSE ACCESSION NUMBER: SE020172

PUBLICATION DATE: JUL 75

TITLE: ENERGY-ENVIRONMENT OPINIONNAIRE.

PERSONAL AUTHOR: WERT, JONATHAN M.

INSTITUTION CODE: BB013392

DESCRIPTOR: ATTITUDES; *ATTITUDE TESTS; *ENERGY; *ENVIRONMENT; ENVIRONMENTAL EDUCATION; *EVALUATION; NATURAL RESOURCES; OPINIONS; *QUESTIONNAIRES; SECONDARY EDUCATION

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$1.67 PLUS POSTAGE.

DESCRIPTIVE NOTE: 10P.

ISSUE: RIENOV76

ABSTRACT: THIS QUESTIONNAIRE IS DESIGNED TO ASSESS THE OPINIONS OF STUDENTS AND TEACHERS OF EDUCATIONAL INSTITUTIONS AND CITIZENS ABOUT ENERGY AND THE ENVIRONMENT. IT IS COMPOSED OF 65 ENERGY AND ENVIRONMENT ORIENTED STATEMENTS ABOUT WHICH THE EXAMINEE GIVES AN OPINION. CHOICES PROVIDED ON THE ANSWER SHEET GIVEN ARE STRONGLY AGREE, MILDLY AGREE, NOT SURE OR DON'T KNOW, MILDLY DISAGREE, AND STRONGLY DISAGREE. REPRODUCTION OF THE EXAM IS ALLOWED WITHOUT PERMISSION. THOUGH CREDIT IS REQUESTED. A RESPONDENT INFORMATION SHEET IS ALSO INCLUDED. (AUTHOR/MA)

INSTITUTION NAME: TENNESSEE UNIV., KNOXVILLE. ENVIRONMENT CENTER.

ACCESSION NUMBER: ED125866

CLEARINGHOUSE ACCESSION NUMBER: SE020173

PUBLICATION DATE: JUL 75

TITLE: ENERGY EDUCATION/CONSERVATION EXAMINATION.

PERSONAL AUTHOR: WERT, JONATHAN M.

INSTITUTION CODE: BB013392

DESCRIPTOR: *ACHIEVEMENT TESTS; CONSERVATION EDUCATION; ENERGY; *ENERGY CONSERVATION; ENVIRONMENTAL EDUCATION; *EVALUATION; NATURAL RESOURCES; *OBJECTIVE TESTS; QUESTIONNAIRES; SECONDARY EDUCATION; *TESTS

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$1.67 PLUS POSTAGE.

DESCRIPTIVE NOTE: 12P.

ISSUE: RIENOV76

ABSTRACT: THIS EXAMINATION IS DESIGNED TO MEASURE THE GENERAL AWARENESS LEVEL OF HIGH SCHOOL STUDENTS, TEACHERS, AND CITIZENS IN THE AREA OF ENERGY DEVELOPMENT AND CONSERVATION. IT IS COMPOSED OF 100 TRUE-FALSE STATEMENTS CONCERNING ENERGY EDUCATION CONCEPTS. A SAMPLE EXAMINEE ANSWER SHEET AND AN EXAMINER KEY ARE INCLUDED. REPRODUCTION OF THE EXAM IS PERMITTED, THOUGH CREDIT IS REQUESTED. AN EXAMINEE INFORMATION SHEET IS ALSO INCLUDED. NO SCORING NORMS HAVE BEEN PREPARED THUS FAR. (AUTHOR/MA)

INSTITUTION NAME: TENNESSEE UNIV., KNOXVILLE. ENVIRONMENT CENTER.

ACCESSION NUMBER: ED125885

CLEARINGHOUSE ACCESSION NUMBER: SE020614

PUBLICATION DATE: 76

TITLE: ENERGY CONSERVATION, UNDERSTANDING AND ACTIVITIES FOR YOUNG PEOPLE.

INSTITUTION CODE: BBB12650

DESCRIPTOR: CONSERVATION EDUCATION; *ELEMENTARY SECONDARY EDUCATION; ENERGY; *ENERGY CONSERVATION; *ENVIRONMENTAL EDUCATION; FUEL CONSUMPTION; *INSTRUCTIONAL MATERIALS; *LEARNING ACTIVITIES; NATURAL RESOURCES; SCIENCE EDUCATION

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 24P.; NOT AVAILABLE IN HARD COPY DUE TO COLORED PICTURES AND PARAGRAPH HEADINGS AND SHADED CHARTS AND GRAPHS; PREPARED BY OFFICE OF CONSERVATION EDUCATION

ISSUE: RIENOV76

ABSTRACT: THIS PUBLICATION ON ENERGY CONSERVATION IS DESIGNED AS A RESOURCE MATERIAL FOR THE CLASSROOM. IT IS DIVIDED INTO THREE CHAPTERS CONCERNING A DEFINITION OF ENERGY, THE CONSERVATION OF ENERGY, AND THE USES OF ENERGY. FOR EACH SUBTOPIC WITHIN THE CHAPTERS, THERE IS BACKGROUND INFORMATION AND SUGGESTED PROJECT TOPICS DESIGNED FOR SECONDARY SCHOOL STUDENTS. A BRIEF GLOSSARY AT THE END OF THE BOOKLET DEFINES SOME OF THE ENERGY RELATED TERMS USED IN THE TEXT. A SHORT BIBLIOGRAPHY AND A LISTING OF RESOURCE PEOPLE ARE INCLUDED AT THE END. (MA)

REPORT NUMBER: FEA-D-75-264

AVAILABILITY: SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON, D.C. 20402 (STOCK NO. 041-018-00091-7, $0.85)

INSTITUTION NAME: FEDERAL ENERGY ADMINISTRATION, WASHINGTON, D.C.

ACCESSION NUMBER: ED125890

CLEARINGHOUSE ACCESSION NUMBER: SE020738

PROGRAM AREA: 95

PUBLICATION DATE: DEC 74

TITLE: PROCEEDINGS, WORLD POPULATION CONFERENCE (RUTGERS UNIVERSITY, NEW BRUNSWICK, NEW JERSEY, DECEMBER 6, 1974).

INSTITUTION CODE: QAT76990

SPONSORING AGENCY CODE: BBB00077

DESCRIPTOR: *CONFERENCE REPORTS; CONFERENCES; *DEMOGRAPHY; ENERGY CONSERVATION; *ENVIRONMENT; ETHICAL VALUES; *POPULATION EDUCATION; POPULATION GROWTH; POPULATION TRENDS; *SPEECHES; ELEMENTARY SECONDARY EDUCATION ACT TITLE III; ESEA TITLE III

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$6.01 PLUS POSTAGE.

DESCRIPTIVE NOTE: 107P.

ISSUE: RIENOV76

ABSTRACT: THIS PUBLICATION CONTAINS THE PROCEEDINGS OF THE FIRST CONFERENCE ON SCIENCE AND SOCIAL ISSUES, WHICH WAS DEVOTED TO THE TOPIC OF WORLD POPULATION. SPEECHES ARE DIVIDED INTO TWO MAJOR GROUPS: (1) POPULATION AND THE ENVIRONMENT, THE NATURAL SCIENCE VIEW; AND (2) POPULATION AND SOCIETY, THE SOCIAL VIEW. TOPICS INCLUDE POPULATION AND NATURAL RESOURCES, ECONOMIC DEVELOPMENT, ETHICAL VALUES, AND POLITICAL SYSTEMS. A BRIEF LISTING OF REFERENCES IS INCLUDED AT THE END OF EACH SPEECH, AS WELL AS TRANSCRIPTS OF THE QUESTION AND ANSWER SESSIONS. A GENERAL SESSION ON POPULATION EDUCATION AND A SPEECH BY BARRY COMMONER CONCLUDE THE BOOK. (MA)

INSTITUTION NAME: RUTGERS, THE STATE UNIV., NEW BRUNSWICK, N.J.

SPONSORING AGENCY NAME: BUREAU OF ELEMENTARY AND SECONDARY EDUCATION (DHEW/OE), WASHINGTON, D.C.

ACCESSION NUMBER: ED126553

CLEARINGHOUSE ACCESSION NUMBER: EA008468

PROGRAM AREA: 95

PUBLICATION DATE: SEP 76

TITLE: ENERGY CONSERVATION. EDUCATIONAL FACILITIES DIGEST 9.

INSTITUTION CODE: RUF19769; SJJ69850

SPONSORING AGENCY CODE: BBB06621

DESCRIPTOR: AIR CONDITIONING; BUILDING DESIGN; *CLIMATE CONTROL; EDUCATIONAL FINANCE; ELEMENTARY SECONDARY EDUCATION; *ENERGY CONSERVATION; HEATING; *OPERATING EXPENSES; SCHOOL DESIGN; SOLAR RADIATION; VENTILATION

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$1.67 PLUS POSTAGE.

DESCRIPTIVE NOTE: 9P.

ISSUE: RIEDEC76

ABSTRACT: BECAUSE TODAY'S SCHOOLS CONSUME LARGE AMOUNTS OF ENERGY AND, CONSEQUENTLY, PAY HIGH ENERGY BILLS, THE TERM "ENERGY CRISIS" IS NO EXAGGERATION TO DESCRIBE THE SITUATION FACING EDUCATORS AND SCHOOL ADMINISTRATORS. SCHOOLS EVERYWHERE ARE UNDER PRESSURE TO USE LESS ELECTRICITY, NATURAL GAS, HEATING OIL, AND GASOLINE. WHILE ENERGY CONSERVATION TECHNIQUES MAY NOT BE THE TOTAL SOLUTION TO THE ENERGY CRISIS, THEY ARE CERTAINLY PART OF THE ANSWER AND THEY ARE A LARGE PART OF THE ANSWER TO THE ENERGY COST CRISIS. THE ARTICLES AND DOCUMENTS ABSTRACTED HERE SHOW HOW SCHOOLS CAN SAVE SIGNIFICANT AMOUNTS OF ENERGY IN A SURPRISING NUMBER OF WAYS. SOME OF THESE WAYS HAVE TO DO WITH MAINTAINING, SERVICING, AND SETTING EQUIPMENT PROPERLY. SOME DEPEND ON CHANGING THE WASTEFUL HABITS THAT ARE PRODUCTS OF A TIME WHEN BOTH ENERGY AND MONEY WERE MORE PLENTIFUL. SOME (AND THESE ARE PERHAPS THE BEST HOPE FOR THE FUTURE) CAN ONLY BE PUT INTO EFFECT BY THOSE DESIGNING FUTURE FACILITIES. SOME OF THE BEST ENERGY SAVING DESIGN IDEAS ARE NEITHER NEW NOR COMPLEX. BUILDERS AND ARCHITECTS ARE RETURNING TO NATURAL RATHER THAN MECHANICAL ANSWERS TO THE ENERGY CRISIS. (AUTHOR/IRT)

CONTRACT NUMBER: OEC-0-8-080353-3514

AVAILABILITY: COUNCIL OF EDUCATIONAL FACILITY PLANNERS, INTERNATIONAL, 29 WEST WOODRUFF AVENUE, COLUMBUS, OHIO 43210 ($1.50)

INSTITUTION NAME: COUNCIL OF EDUCATIONAL FACILITY PLANNERS, COLUMBUS, OHIO.; OREGON UNIV., EUGENE. ERIC CLEARINGHOUSE ON EDUCATIONAL MANAGEMENT.

SPONSORING AGENCY NAME: NATIONAL INST. OF EDUCATION (DHEW), WASHINGTON, D.C.

ACCESSION NUMBER: ED126594

CLEARINGHOUSE ACCESSION NUMBER: EA008536

PUBLICATION DATE: JUL 76

TITLE: GUIDE TO PRODUCTIVITY IMPROVEMENT PROJECTS. THIRD EDITION.

INSTITUTION CODE: BBB07341

SPONSORING AGENCY CODE: BBB13539

DESCRIPTOR: ADMINISTRATION; *ADMINISTRATOR GUIDES; *CITY GOVERNMENT; ENERGY CONSERVATION; FIRE PROTECTION; INSPECTION; *MANAGEMENT; MANAGEMENT SYSTEMS; PARKS; POLICE; *PROGRAM DESCRIPTIONS; *PROGRAM GUIDES; PUBLIC LIBRARIES; RECREATION; SOCIAL SERVICES; UTILITIES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$7.35 PLUS POSTAGE.

DESCRIPTIVE NOTE: 131P.

ISSUE: RIEDEC76

ABSTRACT: THIS EDITION FEATURES OVER 400 PROJECTS THAT HAVE EFFECTED COST SAVINGS AND/OR IMPROVED SERVICES IN A BROAD RANGE OF FUNCTIONAL AREAS OF CITY MANAGEMENT, A JURISDICTIONAL INDEX AS WELL AS A TOPICAL INDEX; IN-DEPTH REPORTS ON SELECTED PROJECTS, AND PROJECT DESCRIPTION FORMS THAT READERS CAN USE TO SHARE THEIR SUCCESSFUL PROJECTS WITH OTHER READERS. THE BROAD SUBJECT HEADINGS ARE GENERAL ADMINISTRATION, PUBLIC SAFETY, PUBLIC WORKS, PARKS/RECREATION/LIBRARIES, INSPECTIONS, ENERGY CONSERVATION, AND SOCIAL SERVICES. (AUTHOR/IRT)

AVAILABILITY: SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON, D.C. 20402 (STOCK NO. 052-003-00181-1, $2.10)

INSTITUTION NAME: INTERNATIONAL CITY MANAGEMENT ASSOCIATION, WASHINGTON, D.C.

SPONSORING AGENCY NAME: NATIONAL CENTER FOR PRODUCTIVITY AND QUALITY OF WORKING LIFE, WASHINGTON, D.C.

ACCESSION NUMBER: ED126946

CLEARINGHOUSE ACCESSION NUMBER: IR003803

PUBLICATION DATE: JUL 76

TITLE: PROCEEDINGS OF THE 1976 SUMMER COMPUTER SIMULATION CONFERENCE (WASHINGTON, D.C., JULY 12-14, 1976).

INSTITUTION CODE: BBBQ2350; BBB13595

DESCRIPTOR: BIONICS; COMPUTER ORIENTED PROGRAMS; *COMPUTER PROGRAMS; COMPUTERS; *CONFERENCE REPORTS; ENERGY; LABORATORY EQUIPMENT; MANAGEMENT GAMES; MATHEMATICAL MODELS; *MODELS; ON LINE SYSTEMS; *OPERATIONS RESEARCH; PREDICTOR VARIABLES; PUBLIC POLICY; RESEARCH METHODOLOGY; RESEARCH TOOLS; SCIENTIFIC RESEARCH; SIMULATED ENVIRONMENT; *SIMULATION; SIMULATORS; SYSTEMS APPROACH; TIME SHARING; TRANSPORTATION; HYBRID SIMULATION SYSTEMS; INTERACTIVE COMPUTER SYSTEMS

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 1,040P.; SPONSORED BY TEN AFFILIATED ORGANIZATIONS

ISSUE: RIEDEC76

ABSTRACT: THE 189 PAPERS ARE ORGANIZED BY TOPIC: SIMULATION METHODOLOGY, HYBRID SYSTEMS AND METHODOLOGY, SIMULATION IN THE CHEMICAL AND PHYSICAL SCIENCES, SIMULATION IN ENVIRONMENTAL SCIENCES AND BIOLOGICAL SYSTEMS, SYSTEMS FOR MANAGERIAL AND SOCIAL SCIENCES, SIMULATION CREDIBILITY, ENERGY, SYSTEMS ENGINEERING, AND GOVERNMENT SIMULATION FACILITIES. ARTICLES ARE INDEXED BY TITLE AND AUTHOR AT THE END OF THE DOCUMENT. (CH)

AVAILABILITY: AFIPS PRESS, 210 SUMMIT AVENUE, MONTVALE, NEW JERSEY 07645 ($30.00)

INSTITUTION NAME: AMERICAN FEDERATION OF INFORMATION PROCESSING SOCIETIES, MONTVALE, N.J.; SOCIETY FOR COMPUTER SIMULATION, LA JOLLA, CALIF.

ACCESSION NUMBER: ED127090

CLEARINGHOUSE ACCESSION NUMBER: RC009370

PUBLICATION DATE: APR 75

TITLE: THE IMPACT OF POWER DEVELOPMENTS ON THE NAVAJO NATION. LAKE POWELL RESEARCH PROJECT BULLETIN NUMBER 7, APRIL 1975.

PERSONAL AUTHOR: ROBBINS, LYNN A.

INSTITUTION CODE: BBB10350

DESCRIPTOR: COMMUNITY DEVELOPMENT; COMPARATIVE ANALYSIS; *ECONOMIC FACTORS; *ENERGY; *INDUSTRIALIZATION; LIVING STANDARDS; *NATURAL RESOURCES; *RESERVATIONS (INDIAN); RURAL ECONOMICS; *SOCIOECONOMIC INFLUENCES; TRIBES; APPALACHIA; *NAVAJOS

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$2.06 PLUS POSTAGE.

DESCRIPTIVE NOTE: 31P.

ISSUE: RIEDEC76

ABSTRACT: THE FEDERAL GOVERNMENT AND PRIVATE CORPORATIONS INVOLVED IN ENERGY PRODUCTION ARE PLACING GREAT EMPHASIS ON THE STRIP-MINING OF VAST COAL RESERVES. THE NAVAJO NATION, WHOSE LANDS CONTAIN 20 BILLION TONS OF LOW-SULPHUR COAL, SELLS VAST QUANTITIES OF ITS NATURAL RESOURCES FOR USE IN THE URBAN CENTERS OF ARIZONA AND SOUTHERN CALIFORNIA. HOWEVER, THE BENEFITS WILL NOT BE OF SUFFICIENT MAGNITUDE TO SIGNIFICANTLY ALTER THE NAVAJO ECONOMY. APPROXIMATELY $10 MILLION WILL ENTER THE NAVAJO ECONOMY EACH YEAR FROM ENERGY-RELATED INDUSTRIAL ACTIVITIES; WHEREAS $350 MILLION WOULD BE NEEDED ANNUALLY TO RAISE THE RESERVATION STANDARD OF LIVING TO THE NATIONAL AVERAGE. NAVAJOS ARE ESSENTIALLY IN THE SAME ECONOMIC POSITION, IN SEVERAL RESPECTS, AS THE RESIDENTS OF APPALACHIA. THE NAVAJO NATION, UNLIKE THE RESIDENTS OF APPALACHIA, IS SEEN AS A RESOURCE OWNER WITH CONTRACTING, LAW-MAKING, AND POLICY-MAKING POWERS. HOWEVER, DECISIONS MADE BY THE NAVAJO NATION INVARIABLY ARE SUBJECT TO FEDERAL REVIEW, AND THIS SPECIAL RELATIONSHIP TO THE FEDERAL GOVERNMENT RENDERS THE NAVAJOS SEMI-AUTONOMOUS AT BEST. THIS RELATIONSHIP SETS THE NAVAJOS APART FROM THE PEOPLE OF APPALACHIA IN THAT THE NAVAJOS ARE A SEMI-SOVEREIGN POLITICAL, LEGAL, AND SOCIAL ENTITY WITH EXPECTATIONS OF FULL ECONOMIC DEVELOPMENT. YET, THE NAVAJO NATION'S ECONOMY CONTINUES TO BE SEVERELY UNDERDEVELOPED IN COMPARISON TO NATIONAL ECONOMIC AVERAGES. (AUTHOR/NU)

GRANT NUMBER: NSF-GI-34832

AVAILABILITY: INSTITUTE OF GEOPHYSICS AND PLANETARY PHYSICS, UNIVERSITY OF CALIFORNIA, LOS ANGELES, CALIFORNIA 90024 ($1.50) PAYABLE TO THE REGENTS OF THE UNIVERSITY OF CALIFORNIA

INSTITUTION NAME: NATIONAL SCIENCE FOUNDATION, WASHINGTON, D.C. RANN PROGRAM.

ACCESSION NUMBER: ED127109

CLEARINGHOUSE ACCESSION NUMBER: SE020241

PUBLICATION DATE: 73

TITLE: THE GASOLINE SHORTAGE: A NATIONAL PERSPECTIVE: A BACKGROUND PAPER, COMMITTEE ON INTERIOR AND INSULAR AFFAIRS, U.S. SENATE, NINETY-THIRD CONGRESS, FIRST SESSION. COMMITTEE PRINT

INSTITUTION CODE: BBB06153

DESCRIPTOR: CONSERVATION (ENVIRONMENT); *ENERGY CONSERVATION; ENVIRONMENT; FEDERAL LEGISLATION; *FUEL CONSUMPTION; FUELS; *GOVERNMENT PUBLICATIONS; NATURAL RESOURCES; POLICY; *REPORTS; *GASOLINE

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 99P.; NOT AVAILABLE IN HARD COPY DUE TO MARGINAL LEGIBILITY OF ORIGINAL DOCUMENT

ISSUE: RIEDEC76

ABSTRACT: THIS PUBLICATION IS A BACKGROUND DOCUMENT FOR THE NATIONAL FUELS AND ENERGY POLICY STUDY AUTHORIZED BY SENATE RESOLUTION 45. THE PURPOSE OF THIS REPORT IS TO IDENTIFY THE ISSUES, TO DESCRIBE THE IMPACT OF PRESENT POLICY ON GASOLINE SUPPLY AND DEMAND, AND TO SUGGEST POTENTIAL MEASURES TO REDUCE THE SHORTFALL. THIS DOCUMENT IS PUBLISHED TO ASSIST MEMBERS OF THE COMMITTEE ON INTERIOR AND INSULAR AFFAIRS, AND OTHER INTERESTED PARTIES, IN THEIR UNDERSTANDING OF THE ISSUES INHERENT IN THE FORMULATION OF A LONG-TERM NATIONAL ENERGY POLICY WHICH ASSURES THE CONTINUED WELFARE OF THE NATION, INCLUDING BALANCED GROWTH, SAFEGUARDING AND ENHANCING THE QUALITY OF THE ENVIRONMENT, AND NATIONAL SECURITY. TOPICS UNDER DISCUSSION INCLUDE SUPPLY AND DEMAND; IMPACT OF SHORTAGES ON THE CONSUMER, AGRICULTURE, AND INDEPENDENT MARKETERS; AND PROPOSED REMEDIAL ACTIONS. THE CONCLUDING SUMMARY INDICATES THAT THE GASOLINE SHORTAGE IS THE RESULT OF SEVERAL INTERACTING FACTORS AND WILL PERSIST FOR SOME TIME. TWO APPENDICES CONTAIN ENERGY RELATED LEGISLATION AND REFERENCES. (AUTHOR/MA)

AVAILABILITY: SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON, D.C. 20402 (STOCK NUMBER 5270-01923, $0.65)

INSTITUTION NAME: CONGRESS OF THE U.S., WASHINGTON, D.C. SENATE COMMITTEE ON INTERIOR AND INSULAR AFFAIRS.

ACCESSION NUMBER: ED127115

CLEARINGHOUSE ACCESSION NUMBER: SE020427

PUBLICATION DATE: 73

TITLE: ENVIRONMENTAL EDUCATION, CONCEPTUAL CURRICULUM FRAMEWORK (TENTATIVE).

INSTITUTION CODE: YEX96007

DESCRIPTOR: *CONCEPTUAL SCHEMES; CONSERVATION EDUCATION; *CURRICULUM DESIGN; CURRICULUM DEVELOPMENT; *CURRICULUM GUIDES; *ELEMENTARY SECONDARY EDUCATION; ENERGY CONSERVATION; *ENVIRONMENTAL EDUCATION; MODELS; NATURAL RESOURCES; UTAH

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$2.06 PLUS POSTAGE.

DESCRIPTIVE NOTE: 33P.

ISSUE: RIEDEC76

ABSTRACT: THESE MATERIALS ARE THE RESULT OF A SUMMER CURRICULUM DEVELOPMENT WORKSHOP DURING THE SUMMER OF 1973. THE PARTICIPANTS PURPOSELY REPRESENTED SEVERAL SUBJECT DISCIPLINES AND GRADE LEVELS TO GIVE CREDENCE TO THE PHILOSOPHY OF ENVIRONMENTAL EDUCATION AS AN INTERDISCIPLINARY STUDY THAT PERMEATES ALL AREAS OF THE CURRICULUM, KINDERGARTEN TO GRADE TWELVE AND BEYOND. THE PUBLICATION INCLUDES A DEFINITION AND A PHILOSOPHY OF ENVIRONMENTAL EDUCATION. THE REMAINING PAGES CONTAIN THE CONCEPTUAL FRAMEWORK DEVELOPED BY THE WORKSHOP PARTICIPANTS. FOUR MAJOR AREAS ARE COVERED: THE GEOSPHERE, THE ENERGYSPHERE, THE SOCIOSPHERE, AND THE BIOSPHERE. THE STATEMENTS FOLLOWING EACH OF THESE ARE DIVIDED INTO CONCEPTUAL SCHEMES, CONCEPTS, SUBCONCEPTS, AND PRINCIPLES. THESE ARE MEANT TO BE USED AS A GUIDELINE TO THE DEVELOPMENT OF AN ENVIRONMENTAL EDUCATION CURRICULUM AND CAN BE USED BY TEACHERS TO FIT THEIR NEEDS. (MA)

INSTITUTION NAME: UTAH STATE BOARD OF EDUCATION, SALT LAKE CITY.

ACCESSION NUMBER: ED127160

CLEARINGHOUSE ACCESSION NUMBER: SE021180

PUBLICATION DATE: 75

TITLE: A TEACHER'S INTRODUCTION TO ENERGY AND ENERGY CONSERVATION: ELEMENTARY.

INSTITUTION CODE: BBB10388; RUF67050

SPONSORING AGENCY CODE: RMQ66000

DESCRIPTOR: CURRICULUM; ELEMENTARY EDUCATION; *ELEMENTARY SCHOOL SCIENCE; *ENERGY; *ENERGY CONSERVATION; GENERAL SCIENCE; *INSTRUCTIONAL MATERIALS; SCIENCE EDUCATION; *TEACHING GUIDES; *OHIO

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$4.67 PLUS POSTAGE.

DESCRIPTIVE NOTE: 93P.; FOR RELATED DOCUMENT, SEE SE021181; PHOTOGRAPHS MAY NOT REPRODUCE WELL

ISSUE: RIEDEC76

ABSTRACT: THIS DOCUMENT IS INTENDED TO GIVE THE ELEMENTARY SCHOOL TEACHER BACKGROUND INFORMATION AND GENERAL SUGGESTIONS FOR TEACHING UNITS AND CORRELATED LEARNING ACTIVITIES RELATED TO ENERGY AND ENERGY CONSERVATION. SECTIONS ARE DIRECTED TO: A PROBLEM SHARED BY ALL, CAUSES, WHAT IS ENERGY?, ENERGY SOURCES, SEARCHING FOR SOLUTIONS, CONSERVATION: AN ETHIC FOR EVERYONE, A GLOSSARY, AND AN EXTENSIVE BIBLIOGRAPHY. (MH)

AVAILABILITY: DIVISION OF EDUCATION REDESIGN AND RENEWAL, OHIO DEPT. OF EDUCATION, 65 SOUTH FRONT ST., COLUMBUS, OHIO 43215 (NO PRICE QUOTED)

INSTITUTION NAME: BATTELLE MEMORIAL INST., COLUMBUS, OHIO. CENTER FOR IMPROVED EDUCATION.; OHIO STATE DEPT. OF EDUCATION, COLUMBUS.

SPONSORING AGENCY NAME: OFFICE OF EDUCATION (DHEW), WASHINGTON, D.C.

ACCESSION NUMBER: ED127161

CLEARINGHOUSE ACCESSION NUMBER: SE021181

PUBLICATION DATE: 75

TITLE: A TEACHER'S INTRODUCTION TO ENERGY AND ENERGY CONSERVATION: SECONDARY.

INSTITUTION CODE: BBB10388; RUF67050

SPONSORING AGENCY CODE: RMQ66000

DESCRIPTOR: CURRICULUM; *ENERGY; *ENERGY CONSERVATION; INSTRUCTIONAL MATERIALS; *PHYSICS; SCIENCE EDUCATION; SECONDARY EDUCATION; *SECONDARY SCHOOL SCIENCE; *TEACHING GUIDES; *OHIO

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$4.67 PLUS POSTAGE.

DESCRIPTIVE NOTE: 97P.; FOR RELATED DOCUMENT, SEE SE021180; PHOTOGRAPHS MAY NOT REPRODUCE WELL

ISSUE: RIEDEC76

ABSTRACT: THIS DOCUMENT IS INTENDED TO GIVE THE SECONDARY SCHOOL TEACHER BACKGROUND INFORMATION AND GENERAL SUGGESTIONS FOR TEACHING UNITS AND CORRELATED LEARNING ACTIVITIES RELATED TO ENERGY AND ENERGY CONSERVATION. SECTIONS ARE DIRECTED TO: A PROBLEM SHARED BY ALL, CAUSES, WHAT IS ENERGY?, ENERGY SOURCES, SEARCHING FOR SOLUTIONS, CONSERVATION: AN ETHIC FOR EVERYONE, A GLOSSARY, AND AN EXTENSIVE BIBLIOGRAPHY. (MH)

AVAILABILITY: DIVISION OF EDUCATION REDESIGN AND RENEWAL, OHIO DEPT. OF EDUCATION, 65 SOUTH FRONT ST., COLUMBUS, OHIO 43215 (NO PRICE QUOTED)

INSTITUTION NAME: BATTELLE MEMORIAL INST., COLUMBUS, OHIO. CENTER FOR IMPROVED EDUCATION.; OHIO STATE DEPT. OF EDUCATION, COLUMBUS.

SPONSORING AGENCY NAME: OFFICE OF EDUCATION (DHEW), WASHINGTON, D.C.

ACCESSION NUMBER: ED127203

CLEARINGHOUSE ACCESSION NUMBER: SE021250

PUBLICATION DATE: MAY 75

TITLE: NATIONAL ASSESSMENT OF EDUCATIONAL PROGRESS. SELECTED RESULTS FROM THE NATIONAL ASSESSMENTS OF SCIENCE: ENERGY QUESTIONS.

INSTITUTION CODE: BBB07446

SPONSORING AGENCY CODE: BBB11065

DESCRIPTOR: *EDUCATIONAL ASSESSMENT; *EDUCATIONAL RESEARCH; ELEMENTARY EDUCATION; *ENERGY; EVALUATION; HIGHER EDUCATION; *NATIONAL SURVEYS; PHYSICS; SCIENCE EDUCATION; SECONDARY EDUCATION; NAEP; *NATIONAL ASSESSMENT OF EDUCATIONAL PROGRESS; RESEARCH REPORTS

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$2.06 PLUS POSTAGE.

DESCRIPTIVE NOTE: 27P.; SMALL PRINT IN TABLES AND GRAPHS

ISSUE: RIEDEC76

ABSTRACT: THIS REPORT PRESENTS SELECTED RESULTS CONCERNING ENERGY QUESTIONS USED TO MEASURE SCIENCE ACHIEVEMENT IN THE NATIONAL ASSESSMENT OF EDUCATIONAL PROGRESS (NAEP), A NATIONWIDE SURVEY OF EDUCATIONAL ATTAINMENTS OF A SAMPLE OF 9-YEAR-OLDS, 13-YEAR-OLDS, 17-YEAR-OLDS, AND ADULTS AGED 26-35. DATA AND GRAPHS ARE PRESENTED CONCERNING THE PERFORMANCES ON ENERGY QUESTIONS ACCORDING TO AGE LEVEL AND TYPE OF QUESTION. (MH)

REPORT NUMBER: NAEP-04-S-01

AVAILABILITY: SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON, D.C. 20402 (SCIENCE REPORT NUMBER 04-S-01, $0.75)

INSTITUTION NAME: EDUCATION COMMISSION OF THE STATES, DENVER, COLO. NATIONAL ASSESSMENT OF EDUCATIONAL PROGRESS.

SPONSORING AGENCY NAME: NATIONAL CENTER FOR EDUCATION STATISTICS (DHEW), WASHINGTON, D.C.

ACCESSION NUMBER: ED127243

CLEARINGHOUSE ACCESSION NUMBER: SO009349

PUBLICATION DATE: JUL 76

TITLE: IMPLEMENTING ENERGY EDUCATION IN FLORIDA'S HIGH SCHOOLS: A TWO-WEEK CREDIT INSTITUTE FOR TEACHERS IN NORTH FLORIDA. FINAL REPORT, VOLUME I.

PERSONAL AUTHOR: LAMART, DAVID E.; ALLEN, RODNEY F.

INSTITUTION CODE: HWP26325

SPONSORING AGENCY CODE: BBB13553

DESCRIPTOR: *CONSERVATION EDUCATION; CURRICULUM DEVELOPMENT; *CURRICULUM ENRICHMENT; ENERGY; *ENERGY CONSERVATION; *ENVIRONMENTAL EDUCATION; HIGH SCHOOL CURRICULUM; INSTRUCTIONAL MATERIALS; SECONDARY EDUCATION; *TEACHER EDUCATION; TEACHER PROGRAMS; *TEACHER WORKSHOPS; TEACHING METHODS

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$4.67 PLUS POSTAGE.

DESCRIPTIVE NOTE: 90P.; PAGES A-4 AND A-5 OF THE ORIGINAL DOCUMENT ARE COPYRIGHTED AND THEREFORE NOT AVAILABLE. THEY ARE NOT INCLUDED IN THE PAGINATION

ISSUE: RIEDEC76

ABSTRACT: THIS IS THE FINAL REPORT OF A WORKSHOP IN WHICH SELECTED TEACHERS FROM FLORIDA PUBLIC SCHOOLS LEARNED ABOUT ENERGY TECHNOLOGY AND CONSERVATION, AND TEACHING METHODOLOGY NEEDED TO INCORPORATE ENERGY EDUCATION INTO EXISTING SCHOOL CURRICULUM. PARTICIPANTS WERE TEACHERS OF SCIENCE, SOCIAL STUDIES, ENVIRONMENTAL STUDIES, AND HOME ECONOMICS. DURING THE FIRST WEEK, ENERGY ISSUES SUCH AS NUCLEAR POWER, ALTERNATIVE ENERGY SOURCES, BIOLOGICAL ENERGY SYSTEMS, AND ELECTRICAL POWER GENERATION WERE STUDIED. SOCIAL AND ENVIRONMENTAL COST BENEFITS OF VARIOUS ALTERNATIVES WERE EXPLORED. ALSO, THE SECOND WEEK WAS DEVOTED TO DEVELOPING TEACHING MATERIALS AND SKILLS. CURRICULUM MODELS AND MODEL LESSONS, SOME OF WHICH MAKE USE OF NEWSPAPER ARTICLES, ARE PROVIDED. THESE INVOLVE (1) DISTINCTION BETWEEN ETHICAL AND NON-ETHICAL QUESTIONS, (2) DEVELOPMENT OF ARGUMENTATION SKILLS, (3) PROBLEM DEFINITION, AND (4) SOCIAL CHANGE THEORIES. EIGHT SAMPLE CLASSROOM ACTIVITIES, PREPARED FROM EXISTING GOVERNMENTAL REPORTS, ARE INCLUDED. THESE RELY ON MAPS AND CHARTS TO HELP STUDENTS UNDERSTAND ENERGY SUPPLY, CONVERSION, AND USE. (AV)

INSTITUTION NAME: FLORIDA STATE UNIV., TALLAHASSEE.

SPONSORING AGENCY NAME: ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION, WASHINGTON, D.C.

ACCESSION NUMBER: ED127414

CLEARINGHOUSE ACCESSION NUMBER: CE005656

PUBLICATION DATE: AUG 74

TITLE: STUDY OF MANPOWER REQUIREMENTS BY OCCUPATION FOR ALTERNATIVE TECHNOLOGIES IN THE ENERGY-RELATED INDUSTRIES, 1970-1990. VOLUMES I, IIA, AND III.

PERSONAL AUTHOR: GUTMANIS, IVARS; AND OTHERS

INSTITUTION CODE: FGK57190

SPONSORING AGENCY CODE: FGK57295

DESCRIPTOR: *CONSTRUCTION INDUSTRY; *EMPLOYMENT PROJECTIONS; *ENERGY; ENERGY CONSERVATION; FUELS; FUTURES (OF SOCIETY); *INDUSTRY; *MANPOWER NEEDS; PETROLEUM INDUSTRY; PLANNING; PREDICTION; TECHNOLOGICAL ADVANCEMENT;

TREND ANALYSIS

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 660P.; VOLUME II B WAS NOT SENT TO THE CLEARINGHOUSE; FOR RELATED DOCUMENT, SEE ED 114 538

ISSUE: RIEJAN77

ABSTRACT: THE REPORT PRESENTS THE METHODOLOGY USED BY THE NATIONAL PLANNING ASSOCIATION (NPA), UNDER CONTRACT TO THE FEDERAL ENERGY ADMINISTRATION (FEA), TO ESTIMATE DIRECT LABOR USAGE COEFFICIENTS IN SOME SIXTY DIFFERENT OCCUPATIONAL CATEGORIES INVOLVED IN CONSTRUCTION, OPERATION, AND MAINTENANCE OF ENERGY FACILITIES. VOLUME 1 PRESENTS DIRECT LABOR USAGE COEFFICIENTS ESTIMATED FROM INDUSTRY SURVEYS AND ALSO A DETAILED BREAKOUT AND RECAPITULATION BY OCCUPATION AND ENERGY SECTOR, OF THE COMPUTED TOTAL DIRECT LABOR REQUIREMENTS BASED ON THE NPA COEFFICIENTS AND ACTIVITY LEVELS SPECIFIED IN A TRAIL FEA SCENARIO FOR ENERGY DEVELOPMENT THROUGH 1977, 1980, AND 1985. VOLUME 2 PART A CONTAINS COEFFICIENTS FOR THE FOLLOWING INDUSTRIES: PETROLEUM, NATURAL GAS, NUCLEAR ENERGY, AND SYNTHETIC FUELS. VOLUME 3 PRESENTS A COMPARISON OF DIRECT LABOR USAGE COEFFICIENTS FOR CONSTRUCTION AND OPERATION AND MAINTENANCE OF ENERGY ACTIVITIES ESTIMATED FROM INDUSTRY SURVEYS BY THE NPA WITH COEFFICIENTS ESTIMATED BY TASK FORCES ESTABLISHED BY THE FEA FOR ITS PROJECT INDEPENDENCE REPORT OF NOVEMBER 1974. (NTIS)

REPORT NUMBER: FEA/B-75/387; FEA/B-75/388; FEA/B-75/390

CONTRACT NUMBER: FEA-C-03-50232-00

GRANT NUMBER: NSF-GR-32464

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, SPRINGFIELD, VIRGINIA 22151 (VOLUME 1, PB-243-474, MF $2.25, HC $8.50; VOLUME 2 A, PB-243-475, MF $2.25, HC $7.25; VOLUME 3, PB-243-477, MF $2.25, HC $7.00; PAPER COPY OF THE SET OF FOUR REPORTS IS AVAILABLE AS PB-243-473-SET AT $28.00)

INSTITUTION NAME: NATIONAL PLANNING ASSOCIATION, WASHINGTON, D.C.

SPONSORING AGENCY NAME: NATIONAL SCIENCE FOUNDATION, WASHINGTON, D.C.

ACCESSION NUMBER: ED127731

CLEARINGHOUSE ACCESSION NUMBER: EA008665

PUBLICATION DATE: SEP 74

TITLE: THE ENERGY HANDBOOK.

PERSONAL AUTHOR: SWEENEY, BETSY

INSTITUTION CODE: BBB13670

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; BUILDING DESIGN; *ENERGY CONSERVATION; *ENVIRONMENTAL EDUCATION; INSTRUCTIONAL AIDS; RECYCLING; SOLAR RADIATION; TRANSPORTATION; WASTE DISPOSAL; *BRITISH COLUMBIA (VICTORIA); CANADA

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$2.06 PLUS POSTAGE.

DESCRIPTIVE NOTE: 33P.

ISSUE: RIEJAN77

ABSTRACT: MAN'S USE AND MISUSE OF ENERGY HAVE CREATED PROBLEMS IN ALL SECTORS OF SOCIETY. MANY ARE ASKING WHAT CAN BE DONE TO HELP SOLVE THESE PROBLEMS SO THAT FUTURE ENERGY NEEDS WILL BE MET AND THE QUALITY OF LIFE IN CANADA CAN BE ASSURED. THIS GUIDE OF DIRECTIONS AND INFORMATION FOCUSES ON INFORMATION KNOWN TO BE READILY AVAILABLE LOCALLY. INTRODUCTORY SECTIONS PRECEDE ANNOTATED BIBLIOGRAPHIES ORGANIZED INTO SECTIONS ON (1) ENERGY PERSPECTIVES, (2) ENERGY CONSERVATION, (3) ALTERNATIVE SOURCES OF ENERGY, (4) LEARNING MORE ABOUT ENERGY, AND (5) DOING SOMETHING ABOUT THE ENERGY SITUATION. (AUTHOR/MLF)

INSTITUTION NAME: GREATER VICTORIA ENVIRONMENTAL CENTER (BRITISH COLUMBIA).

ACCESSION NUMBER: ED128282

CLEARINGHOUSE ACCESSION NUMBER: SO009403

PUBLICATION DATE: MAR 76

TITLE: TWENTY-TWO DIMENSIONS OF THE POPULATION PROBLEM. WORLDWATCH PAPER 5.

PERSONAL AUTHOR: BROWN, LESTER R.; AND OTHERS

INSTITUTION CODE: BBB13108

SPONSORING AGENCY CODE: BBB1C466

DESCRIPTOR: *DEMOGRAPHY; DEVELOPING NATIONS; ECONOMICALLY DISADVANTAGED; ENERGY CONSERVATION; ENVIRONMENTAL INFLUENCES; FAMILY PLANNING; FOOD; *FUTURES (OF SOCIETY); GLOBAL APPROACH; HUMAN GEOGRAPHY; INTERNATIONAL PROGRAMS; LITERACY; NATURAL RESOURCES; NUTRITION; *POPULATION GROWTH; POPULATION TRENDS; URBANIZATION; *WORLD PROBLEMS

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 80P.

ISSUE: RIEJAN77

ABSTRACT: TWENTY-TWO FACETS OF THE WORLD POPULATION PROBLEM ARE EXPLORED. THE TOPICS ARE ECONOMIC, SOCIAL, ECOLOGICAL, AND POLITICAL IN NATURE AND GENERALLY PORTRAY THE STRESSES AND STRAINS ASSOCIATED WITH CONTINUED POPULATION GROWTH IN A WORLD INHABITED BY FOUR BILLION PEOPLE. THESE ASPECTS OF THE POPULATION PROBLEM ARE DISCUSSED: LITERACY, OCEANIC FISHERIES, NATURAL RECREATION AREAS, POLLUTION, INFLATION, ENVIRONMENTAL ILLNESSES, HUNGER, HOUSING, CLIMATE CHANGE, OVERGRAZING, CROWDING, INCOME, URBANIZATION, DEFORESTATION, POLITICAL CONFLICT, MINERALS, HEALTH SERVICES, WATER, UNEMPLOYMENT, ENDANGERED SPECIES, ENERGY, AND INDIVIDUAL FREEDOM. THE AUTHORS CONCLUDE THAT ANALYSIS OF THE IMPLICATIONS OF POPULATION GROWTH BASED ON THESE INDICATORS SUGGESTS STRONGLY THAT THE THREAT POSED BY UNCONTROLLED GROWTH DESERVES MORE ATTENTION FROM NATIONAL AND INTERNATIONAL LEADERS THAN IT IS PRESENTLY GETTING. A BIBLIOGRAPHY OF SELECTED READINGS IS INCLUDED. (AUTHOR/DB)

AVAILABILITY: WORLDWATCH INSTITUTE, 1776 MASSACHUSETTS AVENUE NW, WASHINGTON, D.C. 20036 ($2.00 PAPER, 2-10 COPIES $1.50 EACH, 11-50 COPIES $1.25 EACH, 51 OR MORE COPIES $1.00 EACH)

INSTITUTION NAME: WORLDWATCH INST., WASHINGTON, D.C.

SPONSORING AGENCY NAME: UNITED NATIONS FUND FOR POPULATION ACTIVITIES, NEW YORK, N.Y.

ACCESSION NUMBER: ED128904

CLEARINGHOUSE ACCESSION NUMBER: EA008675

PUBLICATION DATE: 17 APR 75

TITLE: ENERGY CONSERVATION, THE CAPITAL INVESTMENT NEEDS FOR BUILDING REHABILITATION FOR NON-PROFIT EDUCATIONAL INSTITUTIONS. PAPER NO. 2.

INSTITUTION CODE: BBB13714

SPONSORING AGENCY CODE: BBB07296; BBB07734; FGK01660

DESCRIPTOR: *BUILDING IMPROVEMENT; *CAPITAL OUTLAY (FOR FIXED ASSETS); EDUCATIONAL FACILITIES; *EDUCATIONAL FINANCE; ELEMENTARY SECONDARY EDUCATION; *ENERGY CONSERVATION; EXPENDITURES; *FEDERAL AID; FUEL CONSUMPTION; HIGHER EDUCATION; SCHOOL SURVEYS; TABLES (DATA)

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$1.67 PLUS POSTAGE.

DESCRIPTIVE NOTE: 14P.; COMPUTER PRINTOUTS ON PAGES 10-12 MAY NOT REPRODUCE CLEARLY

ISSUE: RIEFEB77

ABSTRACT: THIS PAPER IS ONE OF SEVERAL REPORTS BEING PREPARED BY THE ENERGY TASK FORCE ON THE IMPACT OF ENERGY SUPPLY AND COST TRENDS ON NONPROFIT EDUCATIONAL INSTITUTIONS. THIS PARTICULAR REPORT FOCUSES ON THE NEED TO RENDER EDUCATIONAL FACILITIES MORE ENERGY-EFFICIENT THROUGH A PROGRAM OF CAPITAL INVESTMENTS FOCUSED ON THE REHABILITATION OF EXISTING BUILDINGS. THE REPORT IDENTIFIES THE ADVANTAGES OFFERED BY FEDERAL SUPPORT OF A BUILDING REHABILITATION PROGRAM THAT REDUCES BOTH ENERGY CONSUMPTION AND COSTS IN THE EDUCATIONAL SECTOR; IT ALSO OUTLINES A PHASED INVESTMENT PLAN FOR EDUCATIONAL INSTITUTIONS INVOLVING PROGRESSIVE LEVELS OF TECHNICAL SOPHISTICATION AND EXPENDITURE. SEVERAL TABLES THAT SUMMARIZE SURVEY DATA ON THE ENERGY CONSUMPTION AND ENERGY COSTS OF 40 AMERICAN COLLEGES AND UNIVERSITIES ARE ALSO INCLUDED. ALTHOUGH THE QUANTITATIVE DATA APPLIES SPECIFICALLY TO INSTITUTIONS OF HIGHER EDUCATION, MOST OF THE REPORT APPLIES EQUALLY TO ELEMENTARY AND SECONDARY SCHOOLS AS WELL. (AUTHOR/JG)

INSTITUTION NAME: ENERGY TASK FORCE, WASHINGTON, D.C.

SPONSORING AGENCY NAME: AMERICAN COUNCIL ON EDUCATION, WASHINGTON, D.C.; ASSOCIATION OF PHYSICAL PLANT ADMINISTRATORS OF UNIVERSITIES AND COLLEGES, WASHINGTON, D.C.; NATIONAL ASSOCIATION OF COLL. AND UNIV. BUSINESS OFFICERS, WASHINGTON, D.C.

ACCESSION NUMBER: ED128908

CLEARINGHOUSE ACCESSION NUMBER: EA008679

PUBLICATION DATE: SEP 73

TITLE: ENERGY MANAGEMENT GUIDE FOR BUILDING MANAGEMENT. ELECTRICITY.

INSTITUTION CODE: BBB13715

DESCRIPTOR: *BUILDING OPERATION; CLIMATE CONTROL; *ELECTRICITY; ELEMENTARY SECONDARY EDUCATION; *ENERGY CONSERVATION; *GUIDELINES; HIGHER EDUCATION; LIGHTING; SCHOOL BUILDINGS

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$1.67 PLUS POSTAGE.

DESCRIPTIVE NOTE: 21P.

ISSUE: RIEFEB77

ABSTRACT: THIS GUIDE IS INTENDED FOR USE BY COMMERCIAL BUILDING MANAGEMENT AND OPERATING STAFFS TO ENCOURAGE ENERGY CONSERVATION. THE MEASURES SUGGESTED ARE MEANT TO ALLOW BUILDING OPERATION AT OPTIMUM EFFICIENCY WHILE MINIMIZING ENERGY WASTE. THOUGH MAINLY APPLICABLE TO MULTISTORY BUILDINGS, THE SUGGESTED ENERGY CONSERVATION MEASURES ARE ALSO ADAPTABLE TO OTHER COMMERCIAL STRUCTURES SUCH AS EDUCATIONAL FACILITIES. SPECIFIC TOPICS DISCUSSED INCLUDE CONTROLLABLE ELECTRIC BILLING ELEMENTS, ELECTRIC ENERGY CHARGES, ELECTRIC DEMAND CHARGES, UNNECESSARY AIR CONDITIONING, UNNECESSARY LIGHTING, TIPS ON LIGHTING ECONOMY, AND TIPS ON REDUCING ELECTRIC DEMAND. (AUTHOR/JG)

INSTITUTION NAME: CONSOLIDATED EDISON CO., BROOKLYN, N.Y.

ACCESSION NUMBER: ED128929

CLEARINGHOUSE ACCESSION NUMBER: EA008702

PROGRAM AREA: 80

PUBLICATION DATE: FEB 76

TITLE: HOW TO CONSERVE ENERGY IN SCHOOL TRANSPORTATION SYSTEMS. ENERGY CONSERVATION MATERIALS PACKAGE 4.

INSTITUTION CODE: DUN16650

SPONSORING AGENCY CODE: HHB00077

DESCRIPTOR: BUS TRANSPORTATION; DRIVER EDUCATION; *ENERGY CONSERVATION; EQUIPMENT MAINTENANCE; *FUEL CONSUMPTION; POLICY FORMATION; PREDICTION; *PREVENTION; SCHEDULING; *SCHOOL BUSES; SCHOOL PERSONNEL; *STUDENT TRANSPORTATION; ELEMENTARY SECONDARY EDUCATION ACT TITLE VI; ESEA TITLE V

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$1.67 PLUS POSTAGE.

DESCRIPTIVE NOTE: 19P.

ISSUE: RIEFEB77

ABSTRACT: ENERGY CONSERVATION IN SCHOOL TRANSPORTATION IS A MAJOR AREA OF CONCERN TO THE EDUCATIONAL COMMUNITY. SCHOOL BUSES TRAVEL IN EXCESS OF FOUR BILLION MILES ANNUALLY CONSUMING 900 MILLION GALLONS OF FUEL; TRANSPORTING 55 PERCENT OF THE SCHOOL ENROLLMENT (GRADES K-12). SINCE THE FUEL ALLOCATION EMERGENCY, SCHOOL TRANSPORTATION MANAGERS HAVE BEGUN EFFORTS TO REDUCE THE AMOUNT OF FUEL REQUIRED TO TRANSPORT PUPILS TO AND FROM CLASSROOM SESSIONS AND SCHOOL-RELATED ACTIVITIES. THE GUIDELINES AND SUGGESTIONS IN THIS PAMPHLET ARE INTENDED TO ASSIST THE SCHOOL TRANSPORTATION ADMINISTRATOR TO ACHIEVE BETTER FUEL AND COST MANAGEMENT GOALS IN MEETING TRANSPORTATION DEMANDS. (AUTHOR/MLP)

AVAILABILITY: INTERSTATE ENERGY CONSERVATION LEADERSHIP, COLORADO DEPARTMENT OF EDUCATION, 201 EAST COLFAX AVENUE, DENVER, COLORADO 80203 ($1.00; NO CHARGE TO COLORADO PUBLIC SCHOOLS)

INSTITUTION NAME: COLORADO STATE DEPT. OF EDUCATION, DENVER.

SPONSORING AGENCY NAME: BUREAU OF ELEMENTARY AND SECONDARY EDUCATION (DHEW/OE), WASHINGTON, D.C.

ACCESSION NUMBER: ED129526

CLEARINGHOUSE ACCESSION NUMBER: RC009489

PUBLICATION DATE: AUG 76

TITLE: SOCIO-CULTURAL FACTORS AND ENERGY RESOURCE DEVELOPMENT IN RURAL AREAS IN THE WEST.

PERSONAL AUTHOR: ALBRECHT, STAN L.

DESCRIPTOR: CHANGE STRATEGIES; CULTURAL FACTORS; DEMOGRAPHY; ENERGY; ENVIRONMENTAL INFLUENCES; *MODELS; *PETROLEUM INDUSTRY; *POPULATION GROWTH; *RURAL DEVELOPMENT; RURAL POPULATION; SOCIAL CHANGE; SOCIAL FACTORS; *SOCIAL INFLUENCES; SOCIAL PROBLEMS; SOCIAL SERVICES; VALUES; *QUALITY OF LIFE; *UNITED STATES (ROCKY MOUNTAIN WEST)

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$2.06 PLUS POSTAGE.

DESCRIPTIVE NOTE: 39P.; PAPER PRESENTED AT THE ANNUAL MEETINGS OF THE RURAL SOCIOLOGICAL SOCIETY (NEW YORK, NEW YORK, AUGUST 1976)

ISSUE: RIEFEB77

ABSTRACT: DRAWING UPON AND SYNTHESIZING SOCIAL AND DEMOGRAPHIC DATA (1940-70) FROM 14 COUNTIES IN THE ROCKY MOUNTAIN WEST WHICH ARE CURRENTLY FACING EXTENSIVE POPULATION GROWTH AS THE RESULT OF LARGE SCALE ENERGY RESOURCE DEVELOPMENT, A PRELIMINARY MODEL OF POTENTIAL SOCIOCULTURAL IMPACT WAS DEVELOPED, INCLUDING NATIONAL ENERGY NEEDS AND TRADITIONAL ECONOMIC CONSIDERATIONS. THE MODEL INCORPORATED SOCIOCULTURAL FACTORS INFLUENCING DEVELOPMENT (CULTURAL ATTITUDES AND VALUES AND DEMOGRAPHIC CHARACTERISTICS). THE SOCIOCULTURAL IMPACTS WHICH WERE IDENTIFIED INCLUDED THE FOLLOWING THREE CATEGORIES: (1) INTERPERSONAL, FAMILY, AND COMMUNITY SOCIAL PROBLEMS SUCH AS INCREASED CRIME, ALCOHOLISM, DIVORCE, AND SUICIDE ATTEMPT RATES; (2) GROWING PRESSURES ON PUBLIC SERVICES SUCH AS SCHOOLS, HOUSING, HEALTH DELIVERY, AND LAW ENFORCEMENT; AND (3) IMPACTS ON THE PHYSICAL ENVIRONMENT HAVING QUALITY OF LIFE IMPLICATIONS. IT WAS SUGGESTED THAT PRIMARY IMPACTS WOULD BE DIRECTLY RELATED TO POPULATION CHANGE; THE CURRENT HOMOGENEOUS POPULATIONS WOULD BE MOST AFFECTED BY POPULATION DIVERSIFICATION; AND MITIGATING STRATEGIES SHOULD INCLUDE IMPROVED LOCAL PLANNING AND QUALITY OF LIFE GUARANTEED ECONOMIC BENEFITS (NOT TO BE EXPORTED), IMPACT AID, AND "BACK END" TRUST FUNDS. (JC)

ACCESSION NUMBER: ED129602

CLEARINGHOUSE ACCESSION NUMBER: SE021397

PUBLICATION DATE: 76

TITLE: ENERGY FILMS CATALOG. ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION, 1976.

PERSONAL AUTHOR: SCHWARTZ, SID L., ED.

INSTITUTION CODE: BBB12942

DESCRIPTOR: CATALOGS; *ENERGY; *FILMS; GENERAL SCIENCE; *INSTRUCTIONAL FILMS; *INSTRUCTIONAL MATERIALS; *PHYSICAL SCIENCES; SCIENCE EDUCATION; ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION; ERDA

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$4.67 PLUS POSTAGE.

DESCRIPTIVE NOTE: 82P.; PHOTOGRAPHS MAY NOT REPRODUCE WELL

ISSUE: RIEFEB77

ABSTRACT: THIS IS THE FIRST EDITION OF THE ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION (ERDA) CATALOG OF AVAILABLE MOTION PICTURE FILMS. ONE HUNDRED AND EIGHTY-EIGHT FILMS, PRINCIPALLY RELATING TO ENERGY, ARE BRIEFLY DESCRIBED AND CLASSIFIED INTO THREE UNDERSTANDING LEVELS. ALL FILMS ARE LOANED FREE; COMPLETE BORROWING INSTRUCTIONS AND REQUEST FORMS ARE PROVIDED. (SL)

INSTITUTION NAME: ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION, OAK RIDGE, TENN.

ACCESSION NUMBER: ED129603

CLEARINGHOUSE ACCESSION NUMBER: SE021398

PUBLICATION DATE: 76

TITLE: THE ECONOMICS OF AMERICA'S ENERGY FUTURE.

PERSONAL AUTHOR: SIMMONS, HENRY

INSTITUTION CODE: BBB12942

DESCRIPTOR: *ECONOMICS; *ENERGY; ENVIRONMENTAL EDUCATION; PAMPHLETS; PHYSICAL SCIENCES; SCIENCE EDUCATION; *ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION; ERDA

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$3.50 PLUS POSTAGE.

DESCRIPTIVE NOTE: 67P.; PHOTOGRAPHS MAY NOT REPRODUCE WELL

ISSUE: RIEFEB77

ABSTRACT: THIS IS AN ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION (ERDA) PAMPHLET WHICH REVIEWS ECONOMIC AND TECHNICAL CONSIDERATIONS FOR THE FUTURE DEVELOPMENT OF ENERGY SOURCES. INCLUDED ARE SECTIONS ON PETROLEUM, SYNTHETIC FUELS, OIL SHALE, NUCLEAR POWER, GEOTHERMAL POWER, AND SOLAR ENERGY. ALSO PRESENTED ARE DATA PERTAINING TO U.S. ENERGY PRODUCTION AND CONSUMPTION, TYPICAL PROJECT TIMES TO COMPLETE DEVELOPMENT OF VARIOUS TYPES OF ENERGY FACILITIES, AND ESTIMATED U.S. ENERGY RESERVES. (SL)

INSTITUTION NAME: ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION, OAK RIDGE, TENN.

ACCESSION NUMBER: ED129605

CLEARINGHOUSE ACCESSION NUMBER: SE021400

PUBLICATION DATE: 75

TITLE: STAMPS TELL THE STORY OF NUCLEAR ENERGY.

PERSONAL AUTHOR: ANGELO, JOSEPH A., JR.

INSTITUTION CODE: BBB12942

DESCRIPTOR: ELEMENTARY SECONDARY EDUCATION; *NUCLEAR PHYSICS; *PHYSICS; *SCIENCE HISTORY; *SCIENTISTS; *ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION; ERDA; POSTAGE STAMPS

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$4.67 PLUS POSTAGE.

DESCRIPTIVE NOTE: 96P.; PHOTOGRAPHS OF STAMPS MAY NOT REPRODUCE WELL

ISSUE: RIEFEB77

ABSTRACT: THIS DOCUMENT PROVIDES A SUMMARY HISTORY OF THE INDIVIDUAL SCIENTISTS PRINCIPALLY RESPONSIBLE FOR THE DEVELOPMENT OF NUCLEAR PHYSICS AND A SURVEY OF MODERN UTILIZATION OF ATOMIC ENERGY. IDENTIFIED THROUGHOUT THE BOOKLET ARE POSTAGE STAMPS ILLUSTRATING EACH INDIVIDUAL AND TOPIC DISCUSSED. (SL)

INSTITUTION NAME: ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION, OAK RIDGE, TENN.

ACCESSION NUMBER: ED129606

CLEARINGHOUSE ACCESSION NUMBER: SE021403

PUBLICATION DATE: 75

TITLE: ATOMS ON THE MOVE: TRANSPORTING NUCLEAR MATERIAL.

PERSONAL AUTHOR: OUKERT, JOSEPH M.

INSTITUTION CODE: BBB12942

DESCRIPTOR: *INSTRUCTIONAL MATERIALS; *NUCLEAR PHYSICS; PHYSICS; *SAFETY; *TRANSPORTATION; *ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION; ERDA

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$3.50 PLUS POSTAGE.

DESCRIPTIVE NOTE: 62P.; PHOTOGRAPHS MAY NOT REPRODUCE WELL

ISSUE: RIEFEB77

ABSTRACT: THIS IS AN ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION PAMPHLET OUTLINING IN DETAIL THE MANY ASPECTS INVOLVED IN SAFE TRANSPORTATION OF ALL TYPES OF NUCLEAR MATERIALS. THE DETAILED SAFETY REGULATIONS AND DESIGNS OF VARIOUS SHIPPING PACKAGES AND CONTAINERS ARE EMPHASIZED. INCLUDED ARE MAPS OF WASTE BURIAL SITES AND FUEL PRODUCTION FACILITIES, AN APPENDIX ON FEDERAL NUCLEAR PACKAGING RESTRICTIONS, AND A BIBLIOGRAPHY OF GOVERNMENT DOCUMENTS AND FILMS RELATING TO TRANSPORTATION OF NUCLEAR MATERIALS. (SL)

INSTITUTION NAME: ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION, OAK RIDGE, TENN.

ACCESSION NUMBER: ED129675

CLEARINGHOUSE ACCESSION NUMBER: SO009449

PUBLICATION DATE: 76

TITLE: GLOBAL STUDIES CONFERENCE (GROTON SCHOOL, GROTON, MASSACHUSETTS, JUNE 11-13, 1976).

INSTITUTION CODE: BBB13796

DESCRIPTOR: CASE STUDIES; CONFERENCE REPORTS; *CURRICULUM DEVELOPMENT; DEVELOPMENT; EDUCATIONAL OBJECTIVES; ENERGY; ENERGY CONSERVATION; FOOD; *GLOBAL APPROACH; INSTRUCTIONAL

MATERIALS; *INTERDISCIPLINARY APPROACH; INTERNATIONAL EDUCATION; NATURAL RESOURCES; NATURAL SCIENCES; SECONDARY EDUCATION; SOCIAL SCIENCES; *WORLD AFFAIRS; *WORLD PROBLEMS

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$1.67 PLUS POSTAGE.

DESCRIPTIVE NOTE: 19P.; FOR A RELATED DOCUMENT, SEE ED 113 267

ISSUE: RIEFEB77

ABSTRACT: THIS WORKSHOP PROVIDED A MEETING PLACE FOR 35 SECONDARY-SCHOOL EDUCATORS AND RESOURCE LEADERS TO SHARE CONCERNS, IDEAS, METHODOLOGIES, AND CONTENT IN THE TEACHING OF GLOBAL STUDIES. THE PURPOSE WAS TO BRING TOGETHER TEACHERS FROM THE SOCIAL SCIENCE AND NATURAL SCIENCE DEPARTMENTS TO DEVELOP PLANS TO INTEGRATE THEIR RESPECTIVE DEPARTMENTS FOR THE TEACHING OF GLOBAL ISSUES. SIX GOALS FOR GLOBAL STUDIES WERE IDENTIFIED ALONG WITH RECOMMENDATIONS AND SUGGESTIONS FOR FURTHER ACTION. THE CASE STUDY METHOD WAS RECOMMENDED AS BEING PARTICULARLY USEFUL WHEN FOCUSING ON TOPICS SUCH AS FOOD AND ENERGY. THESE FOUR AREAS OF COMMON CONCERN WERE RECOGNIZED: SKILLS AND CONTENT, METHODOLOGY, RESOURCES AND MATERIALS, AND OBSTACLES TO THE PLANNING AND INTRODUCTION OF A NEW COURSE. THE DOCUMENT CONCLUDES WITH A LIST OF CONFERENCE PAPERS, CONFERENCE PARTICIPANTS, AND RESOURCE PERSONS. THE CONFERENCE AGENDA IS ALSO INCLUDED. (AUTHOR/DB)

INSTITUTION NAME: GLOBAL DEVELOPMENT STUDIES INST., MADISON, N.J.

ACCESSION NUMBER: ED129677

CLEARINGHOUSE ACCESSION NUMBER: SO009452

PUBLICATION DATE: SEP 76

TITLE: IMPLEMENTING ENERGY EDUCATION IN FLORIDA'S HIGH SCHOOLS: A TWO-WEEK CREDIT INSTITUTE FOR TEACHERS IN NORTH FLORIDA. FINAL REPORT, VOLUME II.

PERSONAL AUTHOR: LAHART, DAVID E.; ALLEN, RODNEY F.

INSTITUTION CODE: BBB13810

SPONSORING AGENCY CODE: BBB13553

DESCRIPTOR: CONSERVATION EDUCATION; *CURRICULUM; ELEMENTARY SECONDARY EDUCATION; *ENERGY; ENERGY CONSERVATION; *ENVIRONMENTAL EDUCATION; HOME ECONOMICS; *LEARNING ACTIVITIES; SCIENCE UNITS; SIMULATION; SOCIAL STUDIES UNITS; *TEACHER DEVELOPED MATERIALS; *UNIT PLAN

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$6.01 PLUS POSTAGE.

DESCRIPTIVE NOTE: 102P.

ISSUE: RIEFEB77

ABSTRACT: CURRICULUM UNITS DEVELOPED BY HIGH SCHOOL TEACHERS ARE PROVIDED FOR SPECIFIC CONTENT INSTRUCTION IN ENERGY EDUCATION. BASED ON GROUP AGREEMENT THAT ENERGY EDUCATION SHOULD ASSIST STUDENTS IN CHANGING ATTITUDES, ALTERING PERSONAL BEHAVIOR AND ENERGY CONSUMPTION, AND DEVELOPING SOUND ALTERNATIVES, THE UNITS ARE CATEGORIZED BY SOCIAL STUDIES, SCIENCE, AND HOME ECONOMICS. THE SOCIAL STUDIES UNITS BEGIN WITH SEVERAL ACTIVITIES INVOLVING ENERGY VOCABULARY TERMS. FOR EXAMPLE, CROSSWORD PUZZLES AND BINGO GAMES REINFORCE DEFINITIONS. A WEEK-LONG SIMULATION GAME BASED ON POLITICAL DECISION MAKING CREATES AWARENESS OF ENERGY ALLOCATION PROBLEMS IN TERMS OF SUCH ISSUES AS LITTER CLEAN-UP, NEW HOUSING DEVELOPMENTS, AND PUBLIC SWIMMING POOLS. THE SCIENCE UNITS FOCUS ON THE TECHNOLOGY OF BIOLOGICAL AND PHYSICAL ENERGY SYSTEMS. DEBATES ABOUT DIFFERENT TYPES OF ENERGY USE ARE ENCOURAGED, AND LABORATORY PROJECTS SUCH AS THE CONSTRUCTION OF A SOLAR BIOGENERATOR ARE ENCOURAGED. IN THE HOME ECONOMICS UNITS, STUDENTS LEARN METHODS OF ENERGY CONSERVATION IN FAMILY LIFE AND PERSONAL VALUES. CAREFULLY PLANNED HOUSE CONSTRUCTION, INSULATION, AND USE OF SHRUBBERY ARE SEEN TO REDUCE ENERGY CONSUMPTION IN ALL SEASONS. MAKING HOT PADS OUT OF A DISCARDED QUILT IS ONE OF SEVERAL SUGGESTIONS FOR RECYCLING HOUSEHOLD MATERIALS. (AV)

CONTRACT NUMBER: E-40-1-5120

INSTITUTION NAME: FLORIDA STATE UNIV., TALLAHASSEE. ENVIRONMENTAL EDUCATION PROJECT.

SPONSORING AGENCY NAME: ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION, WASHINGTON, D.C.

ACCESSION NUMBER: ED130117

CLEARINGHOUSE ACCESSION NUMBER: CE008639

PUBLICATION DATE: 75

TITLE: OCCUPATIONAL ORIENTATION: INDUSTRIAL ORIENTED OCCUPATIONS. EXPERIMENTAL CURRICULUM MATERIALS.

INSTITUTION CODE: JIR34744

DESCRIPTOR: ACTIVITY LEARNING; ATTITUDE TESTS; BUILDING TRADES; *CAREER EXPLORATION; CRITERION REFERENCED TESTS; CURRICULUM; ELECTRICAL OCCUPATIONS; ENERGY; GRAPHIC ARTS; INSTRUCTIONAL MATERIALS; *LEARNING ACTIVITIES; LESSON PLANS; METAL WORKING OCCUPATIONS; *OCCUPATIONAL CLUSTERS; OCCUPATIONAL GUIDANCE; PERFORMANCE BASED EDUCATION; SECONDARY EDUCATION; SHOP CURRICULUM; TECHNICAL OCCUPATIONS; *TRADE AND INDUSTRIAL EDUCATION; ILLINOIS

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$4.67 PLUS POSTAGE.

DESCRIPTIVE NOTE: 98P.; FOR RELATED DOCUMENTS SEE CE 008 633-639

ISSUE: RIEMAR77

ABSTRACT: THESE EXPERIMENTAL CURRICULUM MATERIALS, FOR ONE OF FIVE CLUSTERS DEVELOPED FOR THE OCCUPATIONAL ORIENTATION PROGRAM IN ILLINOIS, CONTAIN TEACHER REFERENCES AND A SERIES OF LEARNING ACTIVITY PACKAGES (LAPS) DESIGNED TO ACQUAINT THE STUDENT WITH THE WIDE RANGE OF OCCUPATIONAL CHOICES AVAILABLE IN THE INDUSTRIAL ORIENTED OCCUPATIONS FIELD. THE 30 LAPS, EACH FOCUSING ON A DIFFERENT OCCUPATION ARE GROUPED UNDER SIX CATEGORIES: (1) INDUSTRIAL OCCUPATIONS (GENERAL); (2) COMBINED METAL TRADES; (3) CONSTRUCTION TRADES; (4) ELECTRONICS AND INSTRUMENTATION; (5) ENERGY AND POWER; AND (6) GRAPHIC COMMUNICATIONS. EACH LAP IDENTIFIES THE CATEGORY, THE FOCUS, THE ACTIVITY, AND THE OBJECTIVE. IT LISTS THE EQUIPMENT, SUPPLIES, AND FORMS NEEDED, STATES THE RATIONALE, AND DESCRIBES THE SUGGESTED PROCEDURE AND ALTERNATE ACTIVITIES. THE ACTIVITIES ARE DESIGNED TO GIVE STUDENTS THE OPPORTUNITY TO RESEARCH, OBSERVE, AND GAIN HANDS-ON EXPERIENCE IN REPRESENTATIVE JOBS WITHIN THE CAREER FIELD. THIS DOCUMENT ALSO CONTAINS THE STUDENT AWARENESS/ATTITUDE INVENTORY, AND GUIDELINES FOR DEVELOPING PRE-POST ASSESSMENT TESTS. STUDENT FORMS (FIELD TRIP OBSERVATION FORM, RESOURCE PERSON INFORMATION SHEET, INTERVIEW QUESTIONS, AND OBSERVATION/INTERVIEW FORM) AND LISTS OF 12 REFERENCES AND OF 70 ADDRESSES FOR OBTAINING RESOURCES ARE APPENDED. (MD)

INSTITUTION NAME: ILLINOIS STATE OFFICE OF EDUCATION, SPRINGFIELD.

ACCESSION NUMBER: ED130301

CLEARINGHOUSE ACCESSION NUMBER: CS203014

PUBLICATION DATE: 76

TITLE: OPTIONS IN EDUCATION, TRANSCRIPT FOR FEBRUARY 23, 1976: CONFLICT IN THEORY, CONFLICT IN RESEARCH, AND CONFLICT IN PRACTICE.

INSTITUTION CODE: BBB09521; BBB11427

SPONSORING AGENCY CODE: BBB06621

DESCRIPTOR: ADMINISTRATION; BASIC SKILLS; *EDUCATION; ELEMENTARY SECONDARY EDUCATION; ENERGY CONSERVATION; *INTERVIEWS; MARIHUANA; *NEWS REPORTING; RACISM; *RADIO; SCHOOL INTEGRATION; SCRIPTS; SEXUALITY; TEACHING METHODS; WOMENS EDUCATION; YOUTH PROGRAMS; OPTIONS IN EDUCATION

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$1.67 PLUS POSTAGE.

DESCRIPTIVE NOTE: 21P.

ISSUE: RIEMAR77

ABSTRACT: "OPTIONS IN EDUCATION" IS A RADIO NEWS PROGRAM WHICH FOCUSES ON ISSUES AND DEVELOPMENTS IN EDUCATION. THIS TRANSCRIPT CONTAINS DISCUSSIONS OF CONFLICT IN THEORY--EDUCATION IN AMERICA, DIFFICULTIES IN DRAMATIZING TODAY'S RACISM, AND CHILDREN'S RELATIONSHIPS IN A PREDOMINATELY BLACK SCHOOL; CONFLICT IN RESEARCH--MARIJUANA AND SEXUAL RESPONSE, TEACHING BASIC SKILLS THROUGH DRAMA, AND AN ENERGY CONSERVATION, YOUTH TRAINING PROGRAM; AND CONFLICT IN PRACTICE--WOMEN IN EDUCATION AND PREPARING WOMEN FOR ADMINISTRATIVE ADVANCEMENT. PARTICIPANTS IN THE PROGRAM INCLUDE JOHN MERROW AND WENDY BLAIR, MODERATORS; AUTHOR JONATHON KOZOL; KENNETH B. CLARK; GRETCHEN SCHAFFT; HARRIS RUBIN; VIRGIL HARWOOD; JOE JANETTI; AND VIRGINIA NORDIN. (JM)

INSTITUTION NAME: GEORGE WASHINGTON UNIV., WASHINGTON, D.C. INST. FOR EDUCATIONAL LEADERSHIP.; NATIONAL PUBLIC RADIO, WASHINGTON, D.C.

SPONSORING AGENCY NAME: NATIONAL INST. OF EDUCATION (DHEW), WASHINGTON, D.C.

ACCESSION NUMBER: ED130397

CLEARINGHOUSE ACCESSION NUMBER: EA008776

PUBLICATION DATE: 76

TITLE: A CASE STUDY OF COMPLETE ENERGY MANAGEMENT AT THE HERRICKS UNION FREE SCHOOL DISTRICT.

PERSONAL AUTHOR: SCHREIBER, MELVIN; PAIGE, HASKELL E., SR.

DESCRIPTOR: COST EFFECTIVENESS; ELEMENTARY SECONDARY EDUCATION; *ENERGY CONSERVATION; *FUEL CONSUMPTION; *HEATING; *MANAGEMENT SYSTEMS; *SCHOOL DISTRICT SPENDING; SCHOOL IMPROVEMENT; TABLES (DATA); HERRICKS UNION FREE SCHOOL DISTRICT NY; NEW YORK (NEW HYDE PARK)

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 10P.; NOT AVAILABLE IN HARD COPY DUE TO MARGINAL LEGIBILITY OF ORIGINAL DOCUMENT

ISSUE: RIEMAR77

ABSTRACT: A SCHOOL DISTRICT ENERGY MANAGEMENT PROGRAM REDUCED OIL CONSUMPTION 34 PERCENT AND ELECTRICAL CONSUMPTION 20 PERCENT. LOW COST MODIFICATIONS TO THE HEATING AND VENTILATING EQUIPMENT IN THE SCHOOLS RESULTED IN ENERGY SAVINGS THAT "PAID BACK" THE LABOR PLUS MATERIAL COSTS IN LESS THAN A YEAR. EACH BUILDING WAS PLACED INTO AN ENERGY CONSERVATION CONDITION, REQUIRING THE PERSONNEL USING THE FACILITY TO PERFORM AN ACTION TO OBTAIN THE "OCCUPIED" ENVIRONMENTAL CONDITION. (AUTHOR/MLF)

ACCESSION NUMBER: ED130437

CLEARINGHOUSE ACCESSION NUMBER: EA008822

PUBLICATION DATE: 76

TITLE: GOOD SCHOOL MAINTENANCE. A MANUAL OF PROGRAMS AND PROCEDURES FOR BUILDINGS--GROUNDS--EQUIPMENT.

PERSONAL AUTHOR: HARROUN, JACK T., ED.

INSTITUTION CODE: BBB00935

DESCRIPTOR: *ADMINISTRATOR GUIDES; CHECK LISTS; *ELECTRICAL SYSTEMS; ENERGY CONSERVATION; *EQUIPMENT MAINTENANCE; FOOD

HANDLING FACILITIES; GROUNDS KEEPERS; LANDSCAPING; MANAGEMENT; *MECHANICAL EQUIPMENT; RECORDS (FORMS); SANITATION; SCHEDULING; *SCHOOL MAINTENANCE; SCHOOL SAFETY; SUPERVISORS; WASTE DISPOSAL

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 151P.

ISSUE: RIEMAR77

ABSTRACT: THIS GUIDE PROVIDES A BASIC PROGRAM FOR MANAGERS AND SUPERVISORS RESPONSIBLE FOR THE CARE OF BUILDINGS, GROUNDS, AND EQUIPMENT; PROVIDES THE MAINTENANCE STAFF MEMBER WITH BASIC INFORMATION AND SOLUTIONS TO TYPICAL PROBLEMS; AND IS INTENDED TO BE USED AS A TRAINING TOOL AND A REFERENCE SOURCE. THE MANUAL IS DIVIDED INTO FIVE CATEGORIES. (1) "BASICS OF GOOD SCHOOL MAINTENANCE" COVERS MANAGEMENT CONCEPTS, ENERGY CONSERVATION, SAFETY, AND BUILDING DESIGN. (2) "GENERAL BUILDING MAINTENANCE" PROVIDES BASIC METHODS FOR ORGANIZING AND CARRYING OUT PROCEDURES FOR ROUTINE CLEANING AND EXTERNAL BUILDING CARE. (3) "GROUNDS MAINTENANCE" OFFERS MANAGEMENT PROGRAMS AND STEP-BY-STEP PROCEDURES FOR THE CARE OF TREES, SHRUBS, LAWNS, AND ASPHALT SURFACES. (4) "MECHANICAL EQUIPMENT" COVERS ROUTINE MAINTENANCE AND REPAIR PROCEDURES FOR HEATING AND AIR CONDITIONING SYSTEMS (FROM BOILERS TO TEMPERATURE CONTROLS), SANITARY SYSTEMS AND FIXTURES, SEWAGE TREATMENT PLANTS, ELECTRICAL SYSTEMS, AND FOOD SERVICE EQUIPMENT. (5) "MANAGEMENT TOOLS APPENDIX" PROVIDES READY-TO-USE FORMS FOR WORK ASSIGNMENTS, RECORD KEEPING, WORK EVALUATIONS, AND PHYSICAL PLANT INSPECTIONS. (AUTHOR/MLF)

AVAILABILITY: ILLINOIS ASSOCIATION OF SCHOOL BOARDS, 330 ILES PARK PLACE, SPRINGFIELD, ILLINOIS 62718 ($15.00, QUANTITY DISCOUNTS)

INSTITUTION NAME: ILLINOIS ASSOCIATION OF SCHOOL BOARDS, SPRINGFIELD.

ACCESSION NUMBER: ED130448

CLEARINGHOUSE ACCESSION NUMBER: EA008833

PUBLICATION DATE: SEP 75

TITLE: ENERGY CONSERVATION AND SOLAR RETROFITTING FOR EXISTING BUILDINGS IN OREGON: AN ARCHITECTURAL DESIGN CLASS PROJECT.

INSTITUTION CODE: BBB04270

DESCRIPTOR: ARCHITECTURAL EDUCATION; *BUILDING IMPROVEMENT; CLASS ACTIVITIES; *DESIGN NEEDS; *ENERGY CONSERVATION; FUEL CONSUMPTION; HEATING; HIGHER EDUCATION; HOUSING NEEDS; *PERFORMANCE SPECIFICATIONS; *SOLAR RADIATION; THERMAL ENVIRONMENT; UTILITIES; OREGON

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 126P.; NOT AVAILABLE IN HARD COPY DUE TO MARGINAL LEGIBILITY OF ORIGINAL DOCUMENT ; PREPAIRED BY CENTER FOR ENVIRONMENTAL RESEARCH

ISSUE: RIEMAR77

ABSTRACT: FIVE PRIVATELY OWNED HOMES AND TWO UNIVERSITY OWNED HOMES WERE EXAMINED BY ARCHITECTURE STUDENTS IN ORDER TO FORMULATE DESIGN ALTERNATIVES TO FIT THE HOUSES WITH SOLAR COLLECTION, STORAGE, AND CONTROL DEVICES FOR SUPPLEMENTING DOMESTIC SPACE AND/OR WATER HEATING. GENERAL PRINCIPLES ADVANCED INCLUDE WHY ENERGY CONSERVATION AND SOLAR RETROFITTING ARE IMPORTANT TODAY, AND CONSERVATION IN EXISTING HOMES AS A RESPONSE TO LOCAL CLIMATIC OPPORTUNITIES, REEVALUATED ASSUMPTIONS OF COMFORT, GENERAL DOMESTIC HABITS, ARCHITECTURAL RESPONSE, AND THE RESULTING ENERGY USE. SPECIFIC ALTERNATIVES INCLUDE A DESCRIPTION OF EACH HOME, THE OWNERS, THEIR EXISTING COMFORT REQUIREMENTS, ENERGY NEEDS, AND A RANGE OF ARCHITECTURAL AND DOMESTIC LIFESTYLE ALTERNATIVES FOR ENERGY CONSERVATION AND SOLAR RETROFITTING. (AUTHOR/MLF)

INSTITUTION NAME: OREGON UNIV., EUGENE. SCHOOL OF ARCHITECTURE AND ALLIED ARTS.

ACCESSION NUMBER: ED130821

CLEARINGHOUSE ACCESSION NUMBER: SE020263

PUBLICATION DATE: 75

TITLE: ENVIRONMENTAL EDUCATION, ENERGY - TRANSPORTATION, GRADES K-6.

INSTITUTION CODE: BBB08931

SPONSORING AGENCY CODE: BBB00077

DESCRIPTOR: CONSERVATION EDUCATION; *ELEMENTARY EDUCATION; *ENERGY CONSERVATION; *ENVIRONMENTAL EDUCATION; *INSTRUCTIONAL MATERIALS; INTERDISCIPLINARY APPROACH; *LEARNING ACTIVITIES; NATURAL RESOURCES; RESOURCE MATERIALS; SCIENCE EDUCATION; ELEMENTARY SECONDARY EDUCATION ACT TITLE III; ESEA TITLE III

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 55P.; FOR RELATED DOCUMENTS, SEE SE 020 264 AND SE 020 739; NOT AVAILABLE IN HARD COPY DUE TO MARGINAL LEGIBILITY OF ORIGINAL DOCUMENT

ISSUE: RIEMAR77

ABSTRACT: THE ACTIVITIES IN THIS PUBLICATION ARE TAKEN FROM ONE OF THE THIRTEEN UNITS COMPRISING THE "ENVIRONMENT AND THE QUALITY OF LIFE" SERIES IN NEW JERSEY. THIS BOOK IS ONE OF THREE CONTAINING ENERGY-RELATED STUDENT ACTIVITIES AT VARIOUS GRADE LEVELS. THE TOPIC OF THIS PARTICULAR BOOK IS ENERGY TRANSPORTATION. THE ACTIVITIES CORRESPOND TO A NUMBER OF BEHAVIORAL OBJECTIVES AND ARE FURTHER GROUPED ACCORDING TO SUITABILITY FOR PUPILS IN GRADES K-6. INTERDISCIPLINARY IN APPROACH, THE ACTIVITIES ARE TAKEN FROM THE SUBJECTS OF SCIENCE, ART, SOCIAL STUDIES, MATHEMATICS, LANGUAGE ARTS, ENGLISH, MANUAL ARTS, HEALTH, AND GUIDANCE. THE BOOK CONTAINS SOME CHARTS AND ILLUSTRATIONS, AS WELL AS A LISTING OF SUPPLEMENTARY REFERENCES. (MA)

GRANT NUMBER: OEG-0-71-1754(290)

INSTITUTION NAME: NEW JERSEY STATE COUNCIL FOR ENVIRONMENTAL EDUCATION, UPPER MONTCLAIR.

SPONSORING AGENCY NAME: BUREAU OF ELEMENTARY AND SECONDARY EDUCATION (DHEW/OE), WASHINGTON, D.C.

ACCESSION NUMBER: ED130822

CLEARINGHOUSE ACCESSION NUMBER: SE020264

PUBLICATION DATE: 75

TITLE: ENVIRONMENTAL EDUCATION, ENERGY - TECHNOLOGY, GRADES 7-12.

INSTITUTION CODE: BBB08931

SPONSORING AGENCY CODE: BBB00077

DESCRIPTOR: CONSERVATION EDUCATION; *ENERGY CONSERVATION; *ENVIRONMENTAL EDUCATION; *INSTRUCTIONAL MATERIALS; INTERDISCIPLINARY APPROACH; *LEARNING ACTIVITIES; NATURAL RESOURCES; RESOURCE MATERIALS; SCIENCE EDUCATION; *SECONDARY EDUCATION; ELEMENTARY SECONDARY EDUCATION ACT TITLE III; ESEA TITLE III

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 53P.; FOR RELATED DOCUMENTS, SEE SE 020 263 AND SE 020 739; NOT AVAILABLE IN HARD COPY DUE TO MARGINAL LEGIBILITY OF ORIGINAL DOCUMENT

ISSUE: RIEMAR77

ABSTRACT: THIS PUBLICATION IS ONE OF THREE BOOKS CONTAINING ENERGY-RELATED STUDENT ACTIVITIES AT VARIOUS GRADE LEVELS. THIS PARTICULAR BOOK IS CONCERNED WITH ENERGY TECHNOLOGY. THE ACTIVITIES CORRESPOND TO A NUMBER OF BEHAVIORAL OBJECTIVES AND ARE FURTHER GROUPED ACCORDING TO SUITABILITY FOR PUPILS IN GRADES 7-9. INTERDISCIPLINARY IN APPROACH, THE ACTIVITIES ARE TAKEN FROM THE DISCIPLINES OF SCIENCE, ART, SOCIAL STUDIES, MATHEMATICS, MUSIC, LANGUAGE ARTS, ENGLISH, AND MANUAL ARTS. THE BOOK CONTAINS SOME CHARTS AND ILLUSTRATIONS, AS WELL AS A LISTING OF SUPPLEMENTARY REFERENCES. (MA)

GRANT NUMBER: OEG-0-71-1754(290)

INSTITUTION NAME: NEW JERSEY STATE COUNCIL FOR ENVIRONMENTAL EDUCATION, UPPER MONTCLAIR.

SPONSORING AGENCY NAME: BUREAU OF ELEMENTARY AND SECONDARY EDUCATION (DHEW/OE), WASHINGTON, D.C.

ACCESSION NUMBER: ED130831

CLEARINGHOUSE ACCESSION NUMBER: SE020739

PUBLICATION DATE: 75

TITLE: ENVIRONMENTAL EDUCATION, ENERGY - SOCIETY, GRADES 4-12.

INSTITUTION CODE: BBB08931

SPONSORING AGENCY CODE: BBB00077

DESCRIPTOR: CONSERVATION EDUCATION; *ENERGY CONSERVATION; *ENVIRONMENTAL EDUCATION; *INSTRUCTIONAL MATERIALS; INTERDISCIPLINARY APPROACH; *LEARNING ACTIVITIES; NATURAL RESOURCES; SCIENCE EDUCATION; *SECONDARY EDUCATION; SOCIAL ATTITUDES; ELEMENTARY SECONDARY EDUCATION ACT TITLE III; ESEA TITLE III

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$3.50 PLUS POSTAGE.

DESCRIPTIVE NOTE: 52P.; FOR RELATED DOCUMENTS, SEE SE 020 263-264

ISSUE: RIEMAR77

ABSTRACT: THIS PUBLICATION IS ONE IN A SERIES OF THREE ENERGY-RELATED UNITS SELECTED FROM THE "ENVIRONMENT AND THE QUALITY OF LIFE" ENVIRONMENTAL EDUCATION SERIES. IT CONTAINS NUMEROUS STUDENT LEARNING ACTIVITIES FOR VARIOUS GRADE LEVELS, BASED ON A NUMBER OF BEHAVIORAL OBJECTIVES. EACH ACTIVITY PROVIDES THE PURPOSE, SUITABLE GRADE LEVEL, RELATED SUBJECTS, AND METHODS. SUBJECTS COVERED BY THE ACTIVITIES INCLUDE LANGUAGE ARTS, SOCIAL STUDIES, SCIENCE, MATHEMATICS, ART, ENGLISH, INDUSTRIAL ARTS, MUSIC, AND HOME ECONOMICS. A FINAL RESOURCE LISTS SUPPLEMENTARY REFERENCES INCLUDING BOOKS, FILMS, AND KITS. (MA)

GRANT NUMBER: OEG-0-71-1754(290)

INSTITUTION NAME: NEW JERSEY STATE COUNCIL FOR ENVIRONMENTAL EDUCATION, UPPER MONTCLAIR.

SPONSORING AGENCY NAME: BUREAU OF ELEMENTARY AND SECONDARY EDUCATION (DHEW/OE), WASHINGTON, D.C.

ACCESSION NUMBER: ED130833

CLEARINGHOUSE ACCESSION NUMBER: SE021182

PUBLICATION DATE: 76

TITLE: ENERGY INVESTIGATIONS FOR THE CLASSROOM.

PERSONAL AUTHOR: COON, HERBERT L., ED.; ALEXANDER, MICHELE Y., ED.

INSTITUTION CODE: BBB06137

SPONSORING AGENCY CODE: BBB06021

DESCRIPTOR: ELEMENTARY SECONDARY EDUCATION; *ENERGY; *ENVIRONMENTAL EDUCATION; *INSTRUCTIONAL MATERIALS; INTERDISCIPLINARY APPROACH; *LEARNING ACTIVITIES; NATURAL RESOURCES; *SCIENCE EDUCATION; TEACHING GUIDES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$7.35 PLUS POSTAGE.

DESCRIPTIVE NOTE: 148P.; CONTAINS OCCASIONAL COLORED PAGES

ISSUE: RIEMAR77

ABSTRACT: THIS SOURCEBOOK, DESIGNED FOR USE IN GRADES K-12, CONTAINS ENERGY TEACHING ACTIVITIES RELATED TO ENERGY RESOURCES, PRODUCTION, DISTRIBUTION AND USE. EACH ACTIVITY HAS BEEN CLASSIFIED BY THE EDITORS ACCORDING TO THE MOST APPROPRIATE GRADE LEVEL, SUBJECT MATTER, AND ENERGY CONCEPT INVOLVED. SUBJECT AREAS ARE SCIENCE, MATHEMATICS, SOCIAL STUDIES, LANGUAGE ARTS, AND FINE ARTS. THIS SOURCEBOOK DRAWS HEAVILY ON IDEAS AND FACTUAL MATERIALS FOUND AT THE ERIC CENTER FOR SCIENCE, MATHEMATICS, AND ENVIRONMENTAL EDUCATION. THE REFERENCES CITED IN SPECIFIC ACTIVITIES COULD BE USEFUL TO PERSONS INTERESTED IN OBTAINING MORE ACTIVITIES AND IDEAS RELATED TO ENERGY. MANY OF THE ACTIVITIES ARE INTERDISCIPLINARY IN NATURE AND WERE DEVELOPED OR SUGGESTED BY PUBLIC SCHOOL TEACHERS. (BT)

AVAILABILITY: INFORMATION REFERENCE CENTER (ERIC/IRC), THE OHIO STATE UNIVERSITY, 1200 CHAMBERS ROAD, 3RD FLOOR, COLUMBUS, OHIO 43212 ($4.50)

INSTITUTION NAME: ERIC INFORMATION ANALYSIS CENTER FOR SCIENCE, MATHEMATICS, AND ENVIRONMENTAL EDUCATION, COLUMBUS, OHIO.

SPONSORING AGENCY NAME: NATIONAL INST. OF EDUCATION (DHEW), WASHINGTON, D.C.

ACCESSION NUMBER: ED130844

CLEARINGHOUSE ACCESSION NUMBER: SE021404

PUBLICATION DATE: 75

TITLE: ENERGY STORAGE.

PERSONAL AUTHOR: EATON, WILLIAM W.

INSTITUTION CODE: BB813553

DESCRIPTOR: *EARTH SCIENCE; *ELECTRIC BATTERIES; *ENERGY; GENERAL SCIENCE; *INSTRUCTIONAL MATERIALS; *PHYSICAL SCIENCES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$2.06 PLUS POSTAGE.

DESCRIPTIVE NOTE: 40P.; PHOTOGRAPHS MAY NOT REPRODUCE WELL

ISSUE: RIEMAR77

ABSTRACT: DESCRIBED ARE TECHNOLOGICAL CONSIDERATIONS AFFECTING STORAGE OF ENERGY, PARTICULARLY ELECTRICAL ENERGY. THE BACKGROUND AND PRESENT STATUS OF ENERGY STORAGE BY BATTERIES, WATER STORAGE, COMPRESSED AIR STORAGE, FLYWHEELS, MAGNETIC STORAGE, HYDROGEN STORAGE, AND THERMAL STORAGE ARE DISCUSSED FOLLOWED BY A REVIEW OF DEVELOPMENT TRENDS. INCLUDED ARE DIAGRAMS ILLUSTRATING THE BASIC MECHANISMS OF EACH STORAGE SYSTEM AND ENERGY FLOW DIAGRAMS FOR 1970 AND 1985. (SL)

INSTITUTION NAME: ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION, WASHINGTON, D.C.

ACCESSION NUMBER: ED130845

CLEARINGHOUSE ACCESSION NUMBER: SE021405

PUBLICATION DATE: 75

TITLE: ENERGY TECHNOLOGY.

PERSONAL AUTHOR: EATON, WILLIAM W.

INSTITUTION CODE: BB813553

DESCRIPTOR: *ENERGY; *ENERGY CONSERVATION; ENVIRONMENT; GENERAL SCIENCE; *INSTRUCTIONAL MATERIALS; *NATURAL SCIENCES; *PHYSICAL SCIENCES; *TECHNOLOGY

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$3.50 PLUS POSTAGE.

DESCRIPTIVE NOTE: 65P.; PHOTOGRAPHS MAY NOT REPRODUCE WELL; CONTAINS OCCASIONAL SMALL PRINT IN FIGURES

ISSUE: RIEMAR77

ABSTRACT: REVIEWED ARE TECHNOLOGICAL PROBLEMS FACED IN ENERGY PRODUCTION INCLUDING LOCATING, RECOVERING, DEVELOPING, STORING, AND DISTRIBUTING ENERGY IN CLEAN, CONVENIENT, ECONOMICAL, AND ENVIRONMENTALLY SATISFACTORY MANNERS. THE ENERGY RESOURCES OF COAL, OIL, NATURAL GAS, HYDROELECTRIC POWER, NUCLEAR ENERGY, SOLAR ENERGY, GEOTHERMAL ENERGY, WINDS, TIDES, FUEL CELLS, MAGNETOHYDRODYNAMICS, HYDROGEN, AND VARIOUS STORAGE DEVICES ARE DISCUSSED. ENERGY TRANSMISSION AND DIAGRAMS ILLUSTRATING ENERGY DEMANDS, ELECTRICAL GENERATION CAPACITY, AND ENERGY CONVERTER EFFICIENCIES ARE INCLUDED. (SL)

INSTITUTION NAME: ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION, WASHINGTON, D.C.

ACCESSION NUMBER: ED130846

CLEARINGHOUSE ACCESSION NUMBER: SE021406

PUBLICATION DATE: 75

TITLE: GEOTHERMAL ENERGY.

PERSONAL AUTHOR: EATON, WILLIAM W.

INSTITUTION CODE: BB813553

DESCRIPTOR: *EARTH SCIENCE; *ENERGY; ENVIRONMENT; GENERAL SCIENCE; *INSTRUCTIONAL MATERIALS; *NATURAL SCIENCES; PHYSICAL SCIENCES; *GEOTHERMAL ENERGY

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$2.06 PLUS POSTAGE.

DESCRIPTIVE NOTE: 48P.; PHOTOGRAPHS MAY NOT REPRODUCE WELL

ISSUE: RIEMAR77

ABSTRACT: DESCRIBED ARE THE ORIGIN AND NATURE OF GEOTHERMAL ENERGY. INCLUDED IS THE HISTORY OF ITS DEVELOPMENT AS AN ENERGY SOURCE; TECHNOLOGICAL CONSIDERATIONS AFFECTING ITS DEVELOPMENT AS AN ENERGY SOURCE, ITS ENVIRONMENTAL EFFECTS; ECONOMIC CONSIDERATIONS, AND FUTURE PROSPECTS OF DEVELOPMENT IN THIS FIELD. BASIC SYSTEM DIAGRAMS OF THE OPERATION OF A GEOTHERMAL POWER PLANT ARE INCLUDED. (SL)

INSTITUTION NAME: ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION, WASHINGTON, D.C.

ACCESSION NUMBER: ED130847

CLEARINGHOUSE ACCESSION NUMBER: SE021407

PUBLICATION DATE: 76

TITLE: NUCLEAR POWER AND THE ENVIRONMENT.

PERSONAL AUTHOR: DUKERT, JOSEPH M.

INSTITUTION CODE: BB813553

DESCRIPTOR: EARTH SCIENCE; *ENERGY; *ENVIRONMENT; GENERAL SCIENCE; *INSTRUCTIONAL MATERIALS; NATURAL SCIENCES; *NUCLEAR PHYSICS; *PHYSICAL SCIENCES; *NUCLEAR POWER PLANTS

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$4.67 PLUS POSTAGE.

DESCRIPTIVE NOTE: 95P.; PHOTOGRAPHS MAY NOT REPRODUCE WELL; CONTAINS OCCASIONAL SMALL PRINT

ISSUE: RIEMAR77

ABSTRACT: DESCRIBED ARE THE MAJOR ENVIRONMENTAL EFFECTS RESULTING FROM THE PRODUCTION OF ELECTRICITY BY NUCLEAR POWER PLANTS. DISCUSSED ARE EFFECTS OF WASTE HEAT, RADIOACTIVITY, RADIOACTIVE WASTE ELIMINATION, COSTS, AND FUTURE PROSPECTS. INCLUDED ARE DIAGRAMS ILLUSTRATING COOLING TOWER OPERATION, EFFECTS OF THERMAL DISCHARGE INTO WATER SYSTEMS, RADIOACTIVE WASTE DISPOSAL FACILITIES, AND A READING LIST. (SL)

INSTITUTION NAME: ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION, WASHINGTON, D.C.

ACCESSION NUMBER: ED130848

CLEARINGHOUSE ACCESSION NUMBER: SE021408

PUBLICATION DATE: 76

TITLE: SOLAR ENERGY.

PERSONAL AUTHOR: EATON, WILLIAM W.

INSTITUTION CODE: BB813553

DESCRIPTOR: *ENERGY; *ENVIRONMENT; GENERAL SCIENCE; *INSTRUCTIONAL MATERIALS; *NATURAL SCIENCES; *PHYSICAL SCIENCES; *SOLAR RADIATION

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$3.50 PLUS POSTAGE.

DESCRIPTIVE NOTE: 56P.; PHOTOGRAPHS MAY NOT REPRODUCE WELL; CONTAINS OCCASIONAL SMALL PRINT

ISSUE: RIEMAR77

ABSTRACT: PRESENTED IS THE UTILIZATION OF SOLAR RADIATION AS AN ENERGY RESOURCE PRINCIPALLY FOR THE PRODUCTION OF ELECTRICITY. INCLUDED ARE DISCUSSIONS OF SOLAR THERMAL CONVERSION, PHOTOVOLTIC CONVERSION, WIND ENERGY, AND ENERGY FROM OCEAN TEMPERATURE DIFFERENCES. FUTURE SOLAR ENERGY PLANS, THE ROLE OF SOLAR ENERGY IN PLANT AND FOSSIL FUEL PRODUCTION, AND PUBLIC PARTICIPATION IN SOLAR ENERGY DEVELOPMENT ARE ALSO PRESENTED. DIAGRAMS ILLUSTRATING SOLAR COLLECTORS, AVAILABILITY OF SOLAR AND WIND ENERGY, OPERATION OF OCEAN THERMAL POWER PLANTS, AND AN APPENDIX LISTING THE BASIC UNITS OF ENERGY ARE PROVIDED FOR REFERENCE. (SL)

INSTITUTION NAME: ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION, WASHINGTON, D.C.

ACCESSION NUMBER: ED130849

CLEARINGHOUSE ACCESSION NUMBER: SE021413

PUBLICATION DATE: 19 AUG 76

TITLE: REAL INCREASES SEEN FOR FEDERAL R&D FUNDING OF ENERGY, EDUCATION, SCIENCE, AND DEFENSE IN FY 1977. SCIENCE RESOURCES STUDIES HIGHLIGHTS, AUGUST 19, 1976.

INSTITUTION CODE: BB808446

DESCRIPTOR: *ANNUAL REPORTS; ENERGY; ENGINEERING EDUCATION; *FEDERAL AID; FINANCIAL SUPPORT; *RESEARCH; SCIENCE EDUCATION; *SCIENCES; *SCIENTIFIC RESEARCH; STATISTICAL DATA

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 5P.; NOT AVAILABLE IN HARD COPY DUE TO NUMEROUS SMALL PRINT AND COLORED TYPE

ISSUE: RIEMAR77

ABSTRACT: THIS REPORT PRESENTS DATA COMPILED AS A PART OF A COMPREHENSIVE PROGRAM TO MEASURE AND ANALYZE THE NATION'S

RESOURCES EXPENDED FOR RESEARCH AND DEVELOPMENT. IN FISCAL YEAR 1977, FEDERAL R&D OBLIGATIONS ARE EXPECTED TO TOTAL $43.9 BILLION, A RECORD HIGH AND AN INCREASE OF 8.6% OVER 1976. THIS UPWARD SHIFT OCCURS DESPITE THE FACT THAT MORE THAN ONE-HALF OF THE R&D FUNCTIONAL AREAS REFLECT DECLINES OR ONLY NOMINAL INCREASES. OF THE 15 FUNCTIONS THAT CATEGORIZE FEDERAL R&D PROGRAMS IN 1977, FOUR REFLECT SIGNIFICANT INCREASES: ENERGY DEVELOPMENT AND CONVERSION - UP 24%; EDUCATION - UP 15%; SCIENCE AND TECHNOLOGY BASE - UP 14%; AND NATIONAL DEFENSE - UP 13%. THE LARGEST DOLLAR DECREASE - $100 MILLION - IS SCHEDULED FOR HEALTH, AND THE NEXT - $19 MILLION - IS REPRESENTED BY CRIME PREVENTION AND CONTROL. DATA ARE GRAPHED TO SHOW R&D FUNDING TRENDS FOR 1969, 1976 (EST.) AND 1977 (EST.), AND FOR THE PERIOD 1969-1977. R&D FUNCTIONS ARE TABULATED BY FUNCTION. (AUTHOR/MH)

REPORT NUMBER: NSF-76-319

INSTITUTION NAME: NATIONAL SCIENCE FOUNDATION, WASHINGTON, D.C. DIV. OF SCIENCE RESOURCES STUDIES.

ACCESSION NUMBER: ED130949

CLEARINGHOUSE ACCESSION NUMBER: SO009528

PROGRAM AREA: 95

PUBLICATION DATE: 76

TITLE: A GUIDE TO FREE AND INEXPENSIVE CONSUMER EDUCATION RESOURCES.

PERSONAL AUTHOR: VICKERS, CAROLE A.

INSTITUTION CODE: 88809635

SPONSORING AGENCY CODE: HHU66000

DESCRIPTORS: ADULT EDUCATION; AUDIOVISUAL AIDS; *BIBLIOGRAPHIES; *CONSUMER EDUCATION; CURRICULUM GUIDES; ELEMENTARY SECONDARY EDUCATION; ENERGY CONSERVATION; FOODS INSTRUCTION; GAMES; *HEALTH EDUCATION; *HOME MANAGEMENT; MONEY MANAGEMENT; MULTIMEDIA INSTRUCTION; PROGRAMED INSTRUCTION; PURCHASING; *RESOURCE GUIDES; RESOURCE UNITS; SIMULATION; UNIT PLAN

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$18.07 PLUS POSTAGE.

DESCRIPTIVE NOTE: 330P.

ISSUE: RIEMAR77

ABSTRACT: THIS GUIDE CONTAINS SOURCES OF FREE OR INEXPENSIVE CONSUMER-EDUCATION MATERIALS FOR USE IN SCHOOLS OR FOR ADULTS. SPECIFIC CONTENTS INCLUDE AN ANNOTATED BIBLIOGRAPHY OF 149 LISTS OF PUBLICATIONS DEALING WITH CONSUMER EDUCATION MATERIALS; 77 ARTICLES IN PERIODICALS PUBLISHED IN THE 1970S; 93 AUDIOVISUALS OR MULTIMEDIA KITS; 145 BOOKS ABOUT CONSUMER AFFAIRS AND CONSUMER EDUCATION; 46 CURRICULUM GUIDES; 13 GAMES AND SIMULATIONS; 26 PROGRAMMED INSTRUCTION UNITS; AND 45 TEACHING UNITS, LESSON PLANS, AND MODULES. THE 20 SUBJECT CATEGORIES ARE CLOTHING AND SOFT GOODS; CONSUMER AND COMMUNITY; EDUCATION; CREDIT; CONSUMER IN THE ECONOMY; ENERGY CONSERVATION; FOOD; FURNITURE, APPLIANCES, EQUIPMENT; HEALTH; HOUSING; INFORMATION, ORGANIZATION, EDUCATION; INSURANCE; INVESTMENT AND SAVINGS; LEISURE; CONSUMER IN THE MARKET; MONEY AND BANKING; MONEY MANAGEMENT; CONSUMER PROTECTION; SERVICES; AND TRANSPORTATION. THE VARIETY OF MATERIALS RANGES FROM BOOKLETS INSTRUCTING HOME OWNERS ON HOW TO DESIGN AND ARRANGE A SPACE AGE KITCHEN TO GAMES FOR HIGH SCHOOL STUDENTS WHICH TEACH THE DANGERS OF DRUG ABUSE. RESOURCES ARE LISTED BOTH BY TYPE OF RESOURCE AND BY SUBJECT MATTER CONTENT. EACH LISTING CONTAINS INFORMATION ABOUT TITLE, TYPE OF PUBLICATION, PAGES, DATE, COST, READING LEVEL, ANNOTATION, AND PUBLISHER. ADDRESSES OF PUBLISHERS ARE LISTED AT THE BEGINNING OF THE GUIDE. (AV)

INSTITUTION NAME: MARSHALL UNIV., HUNTINGTON, W. VA. DEPT. OF HOME ECONOMICS.

SPONSORING AGENCY NAME: OFFICE OF EDUCATION (DHEW), WASHINGTON, D.C.

ACCESSION NUMBER: ED131539

CLEARINGHOUSE ACCESSION NUMBER: EA008858

PUBLICATION DATE: 74

TITLE: SOLAR ENERGY FOR PACIFIC NORTHWEST BUILDINGS.

PERSONAL AUTHOR: REYNOLDS, JOHN S.

INSTITUTION CODE: 88804270

SPONSORING AGENCY CODE: 88806674

DESCRIPTORS: *ARCHITECTURAL RESEARCH; BIBLIOGRAPHIES; *CLIMATIC FACTORS; DAYLIGHT; ENERGY; *ENERGY CONSERVATION; EQUIPMENT STANDARDS; FACILITY CASE STUDIES; FACILITY GUIDELINES; HEATING; METEOROLOGY; *SOLAR RADIATION; TABLES (DATA); TEMPERATURE; THERMAL ENVIRONMENT; OREGON (EUGENE); *UNITED STATES (NORTHWEST); UNIVERSITY OF OREGON

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 95P.; PHOTOGRAPHS AND SOME CHARTS MAY NOT REPRODUCE CLEARLY

ISSUE: RIEAPR77

ABSTRACT: DATA PRESENTED IN THIS REPORT INDICATE THAT SOLAR SPACE AND WATER HEATING ARE POSSIBLE IN THE PACIFIC NORTHWEST. THE FIRST SECTION OF THE REPORT CONTAINS SOLAR RECORDS FROM SEVERAL STATIONS IN THE REGION ILLUSTRATING SPACE HEATING NEEDS THAT COULD BE MET, ON AN AVERAGE DAILY BASIS, BY SOLAR ENERGY. THE DATA ARE SUMMARIZED, AND SOME PRELIMINARY PLANNING HINTS ARE OFFERED INCLUDING ANALYZING A SITE FOR SOLAR COLLECTOR SUITABILITY, AND A PROCEDURE FOR SIZING A COLLECTOR AND STORAGE TANK. THE SECOND SECTION DISCUSSES TWO OF THE EARLIEST SOLAR COLLECTOR HOUSES IN THE AREA AND COMPARES THEM WITH THREE WELL-KNOWN SOLAR HOUSES ELSEWHERE. A SELECTED BIBLIOGRAPHY ON SOLAR ENERGY IN ARCHITECTURE IS INCLUDED. THE CONCLUDING SECTION CONTAINS PHOTOGRAPHS AND DESCRIPTIONS OF LOCAL DESIGN SOLUTIONS THAT EXCLUDE SUMMER SUN BUT WELCOME WINTER LIGHT, INCLUDING THE EFFECTS OF TREES AND VINES. CLIMATOLOGICAL CHARTS, BASED ON EIGHT YEARS OF DATA FROM THE WEATHER BUREAU AT THE EUGENE AIRPORT, ARE INCLUDED FOR THE PURPOSE OF EXPLORING LOW-ENERGY BUILDING DESIGN IN GENERAL. (MLF)

AVAILABILITY: CENTER FOR ENVIRONMENTAL RESEARCH, SCHOOL OF ARCHITECTURE AND ALLIED ARTS, UNIVERSITY OF OREGON, EUGENE, OREGON 97403 ($3.50, QUANTITY DISCOUNTS)

INSTITUTION NAME: OREGON UNIV., EUGENE. SCHOOL OF ARCHITECTURE AND ALLIED ARTS.

SPONSORING AGENCY NAME: OREGON UNIV., EUGENE. OFFICE OF SCIENTIFIC AND SCHOLARLY RESEARCH.

ACCESSION NUMBER: ED131552

CLEARINGHOUSE ACCESSION NUMBER: EA008871

PUBLICATION DATE: 76

TITLE: SURVEY OF SOLAR BUILDINGS.

PERSONAL AUTHOR: GRAY, ROBERT; BAKER, STEVEN

INSTITUTION CODE: 88804270

DESCRIPTORS: ARCHITECTURAL RESEARCH; BUILDING DESIGN; CLIMATIC FACTORS; COMPARATIVE ANALYSIS; *ENERGY CONSERVATION; *FACILITY CASE STUDIES; FACILITY GUIDELINES; HEATING; *PERFORMANCE SPECIFICATIONS; *SOLAR RADIATION; SURVEYS; THERMAL ENVIRONMENT; UNIVERSITY OF OREGON

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 17GP.

ISSUE: RIEAPR77

ABSTRACT: THIS SURVEY BRINGS TOGETHER INFORMATION CONCERNING THE GROWING NUMBER OF BUILDINGS UTILIZING SOLAR ENERGY AND IS DESIGNED TO FACILITATE THE COMPARISON OF SPECIFIC CHARACTERISTICS OF THE BUILDINGS. THE 66 U.S. ENTRIES ARE DIVIDED INTO FIVE REGIONS; ARRANGED BY STATE, AND ROUGHLY BY DATE WITHIN EACH STATE. SEVEN ENTRIES ARE FROM OTHER COUNTRIES. A SEPARATE ENTRY FOR EACH BUILDING LISTS IN A STANDARD FORM DETAILED INFORMATION, FOLLOWED BY ADDITIONAL COMMENTS, A BIBLIOGRAPHY, AND A DRAWING OF THE BUILDING. INFORMATION LISTED INCLUDES BUILDING LOCATION; CLIMATOLOGICAL FACTORS; CHARACTERISTICS OF THE BUILDING; COLLECTOR, AND STORAGE TANK; AUXILIARY ENERGY SOURCES; HEAT COLLECTION AND DISTRIBUTION METHODS; HOT WATER SUPPLY; AUTOMATIC CONTROLS; COOLING; AND PERFORMANCE SPECIFICATIONS. (MLF)

AVAILABILITY: CENTER FOR ENVIRONMENTAL RESEARCH, SCHOOL OF ARCHITECTURE AND ALLIED ARTS, UNIVERSITY OF OREGON, EUGENE, OREGON 97403 ($5.00, QUANTITY DISCOUNTS)

INSTITUTION NAME: OREGON UNIV., EUGENE. SCHOOL OF ARCHITECTURE AND ALLIED ARTS.

ACCESSION NUMBER: ED131597

CLEARINGHOUSE ACCESSION NUMBER: EA008925

PUBLICATION DATE: 5 AUG 75

TITLE: RESEARCH PROPOSAL FOR THE DESIGN AND ENGINEERING PHASE OF A SOLAR HEATING AND COOLING SYSTEM EXPERIMENT AT THE WARNER ROBINS PUBLIC LIBRARY, WARNER ROBINS, GEORGIA. SUBMITTED TO THE UNITED STATES ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION.

PERSONAL AUTHOR: PHILLIPS, WARREN H.; AND OTHERS

DESCRIPTORS: *AIR CONDITIONING; BUILDING DESIGN; BUILDING INNOVATION; ENERGY CONSERVATION; ENGINEERING; *HEATING; *PUBLIC LIBRARIES; *RESEARCH PROPOSALS; *SOLAR RADIATION; GEORGIA (WARNER ROBINS); WARNER ROBINS PUBLIC LIBRARY GA

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$4.67 PLUS POSTAGE.

DESCRIPTIVE NOTE: 94P.

ISSUE: RIEAPR77

ABSTRACT: A NUMBER OF REASONS ARE ADVANCED TO INCLUDE A SOLAR HEATING AND COOLING EXPERIMENT IN A LIBRARY BUILDING. THE UNIQUE ASPECTS OF THE EXPERIMENT ARE TO BE A SEASONALLY ADJUSTABLE COLLECTOR TILT AND TESTING OF A NEW GENERATION OF ABSORPTION AIR CONDITIONERS. AFTER A BRIEF DESCRIPTION OF THE PROPOSED EXPERIMENT, THE PROPOSAL CONTAINS FORMS FILED BY THE ARCHITECTS AND ENGINEERS, AND LETTERS FROM U.S. SENATORS, CONGRESSMEN FROM GEORGIA, AND OTHERS IN FAVOR OF THE PROJECT. THE APPENDIXES CONTAIN ILLUSTRATIONS OF THE SITE LOCATION, ARCHITECTURAL PLANS, AND DESCRIPTIONS OF COMPUTER PROGRAMS TO BE USED IN THE EXPERIMENT. (MLF)

ACCESSION NUMBER: ED132004

CLEARINGHOUSE ACCESSION NUMBER: SE021440

PUBLICATION DATE: 76

TITLE: LIVING TODAY WITH AN EYE TOWARD TOMORROW. PROJECT ECOLOGY ELE PAK, WILDER PAK .

PERSONAL AUTHOR: WILDER, LOU

INSTITUTION CODE: ZB031880

SPONSORING AGENCY CODE: 88800077

DESCRIPTORS: *ENERGY; *ENVIRONMENTAL EDUCATION; GRADE 9; *HOME ECONOMICS; *INSTRUCTIONAL MATERIALS; *SECONDARY

EDUCATION; *UNITS OF STUDY (SUBJECT FIELDS); ELEMENTARY SECONDARY EDUCATION ACT TITLE III; ESEA TITLE III

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$1.67 PLUS POSTAGE.

DESCRIPTIVE NOTE: 21P.; FOR RELATED DOCUMENTS, SEE SE 021 438-478

ISSUE: RIEAPR77

ABSTRACT: THIS IS ONE OF A SERIES OF UNITS FOR ENVIRONMENTAL EDUCATION DEVELOPED BY THE HIGHLINE PUBLIC SCHOOLS. THIS UNIT IS DESIGNED FOR A NINTH-GRADE HOME ECONOMICS CLASS. INCLUDED ARE FIVE LESSONS. MOST ACTIVITIES RELATE TO ENERGY USE. EACH LESSON INCLUDES THE CONCEPT OF THE LESSON, MATERIALS NEEDED, NOTES TO THE TEACHER, AND PROCEDURE. (RM)

AVAILABILITY: HIGHLINE PUBLIC SCHOOLS, INSTRUCTIONAL DIVISION, PROJECT ECOLOGY ESEA TITLE III, BILL GUISE, DIRECTOR, 15675 AMBAUM BLVD., S.W., SEATTLE, WA 98166 ($2.50)

INSTITUTION NAME: HIGHLINE PUBLIC SCHOOLS, SEATTLE, WASH.

SPONSORING AGENCY NAME: BUREAU OF ELEMENTARY AND SECONDARY EDUCATION (DHEW/OE), WASHINGTON, D.C.

ACCESSION NUMBER: ED132009

CLEARINGHOUSE ACCESSION NUMBER: SE021445

PUBLICATION DATE: 76

TITLE: HOME SWEET EARTH. PROJECT ECOLOGY ELE PAK, MEANEY PAK .

PERSONAL AUTHOR: MEANEY, MARIE

INSTITUTION CODE: ZBU3180

SPONSORING AGENCY CODE: 88800077

DESCRIPTOR: ECOLOGY; *ELEMENTARY SCHOOL SCIENCE; *ENERGY; *ENVIRONMENT; *ENVIRONMENTAL EDUCATION; GRADE 1; *INSTRUCTIONAL MATERIALS; *UNITS OF STUDY (SUBJECT FIELDS); ELEMENTARY SECONDARY EDUCATION ACT TITLE III; ESEA TITLE III

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$2.06 PLUS POSTAGE.

DESCRIPTIVE NOTE: 43P.; FOR RELATED DOCUMENTS, SEE SE 021 436-478; CONTAINS OCCASIONAL LIGHT AND BROKEN TYPE

ISSUE: RIEAPR77

ABSTRACT: THIS IS ONE OF A SERIES OF UNITS FOR ENVIRONMENTAL EDUCATION DEVELOPED BY THE HIGHLINE PUBLIC SCHOOLS. THE EMPHASIS OF THE 10 LESSONS IN THIS UNIT IS ON ENERGY, THE EARTH'S RESOURCES, AND THE USE OF EARTH RESOURCES, BY MAN AND OTHER LIVING THINGS. THE MATERIALS ARE DESIGNED FOR USE AT GRADE 1, BUT COULD BE USED IN HIGHER GRADES. EACH LESSON USUALLY INCLUDES THE CONCEPT OF THE LESSON, MATERIALS NEEDED, NOTES TO THE TEACHER, PROCEDURE, EVALUATIVE ACTIVITIES, AND ADDITIONAL SUGGESTED ACTIVITIES. THE MATERIALS WERE TRIED AND EVALUATED; EVALUATION DATA MAY BE OBTAINED FROM THE HIGHLINE PUBLIC SCHOOLS. (RM)

AVAILABILITY: HIGHLINE PUBLIC SCHOOLS, INSTRUCTIONAL DIVISION, PROJECT ECOLOGY ESEA TITLE III, BILL GUISE, DIRECTOR, 15675 AMBAUM BLVD., S.W., SEATTLE, WA 98166 ($2.50)

INSTITUTION NAME: HIGHLINE PUBLIC SCHOOLS, SEATTLE, WASH.

SPONSORING AGENCY NAME: BUREAU OF ELEMENTARY AND SECONDARY EDUCATION (DHEW/OE), WASHINGTON, D.C.

ACCESSION NUMBER: ED132024

CLEARINGHOUSE ACCESSION NUMBER: SE021503

PUBLICATION DATE: 76

TITLE: A NATIONAL PLAN FOR ENERGY RESEARCH, DEVELOPMENT & DEMONSTRATION: CREATING ENERGY CHOICES FOR THE FUTURE, 1976. VOLUME 1: THE PLAN.

INSTITUTION CODE: 88813553

DESCRIPTOR: *ENERGY; ENERGY CONSERVATION; GOVERNMENT PUBLICATIONS; *GOVERNMENT ROLE; *NATIONAL PROGRAMS; *PLANNING; *RESEARCH; SCIENCE EDUCATION; SCIENTIFIC RESEARCH; SOLAR RADIATION; TECHNOLOGY; *ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION; ERDA

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$6.01 PLUS POSTAGE.

DESCRIPTIVE NOTE: 129P.

ISSUE: RIEAPR77

ABSTRACT: THIS REPORT PRESENTS A PLAN DEVELOPED BY THE ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION (ERDA) CONCERNING FUTURE ENERGY SOURCES. THE PLAN SUMMARIZES ERDA'S CURRENT VIEWS ON THE ENERGY TECHNOLOGIES THE U.S. WILL NEED TO ACHIEVE LONG-TERM ENERGY INDEPENDENCE. THE ROLE OF THE PRIVATE SECTOR IN THE DEVELOPMENT AND COMMERCIALIZATION OF NEW ENERGY TECHNOLOGIES IS ADDRESSED, AND CONSERVATION TECHNOLOGIES ARE RANKED WITH SUPPLY TECHNOLOGIES AS THE HIGHEST PRIORITIES FOR NATIONAL ACTION. (MH)

REPORT NUMBER: ERDA-76-1

AVAILABILITY: SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON, D.C. 20402 (STOCK NUMBER 052-010-00478-6, $2.00)

INSTITUTION NAME: ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION, WASHINGTON, D.C.

ACCESSION NUMBER: ED132025

CLEARINGHOUSE ACCESSION NUMBER: SE021547

PUBLICATION DATE: 75

TITLE: THE ENVIRONMENTAL IMPACT OF ELECTRICAL POWER GENERATION: NUCLEAR AND FOSSIL.

INSTITUTION CODE: SYN71650

SPONSORING AGENCY CODE: 88813553

DESCRIPTOR: ADULT EDUCATION; *COLLEGE SCIENCE; CURRICULUM; *ELECTRICAL SYSTEMS; *ENERGY; ENERGY CONSERVATION; *ENVIRONMENT; FUELS; HIGHER EDUCATION; INSTRUCTIONAL MATERIALS; SCIENCE EDUCATION; *TEXTBOOKS; UTILITIES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$12.71 PLUS POSTAGE.

DESCRIPTIVE NOTE: 233P.; FOR RELATED TEACHER'S GUIDE, SEE SE 021 548; CONTAINS OCCASIONAL MARGINAL LEGIBILITY IN TABLES AND FIGURES

ISSUE: RIEAPR77

ABSTRACT: THIS TEXT WAS WRITTEN TO ACCOMPANY A COURSE CONCERNING THE NEED, ENVIRONMENTAL COSTS, AND BENEFITS OF ELECTRICAL POWER GENERATION. IT WAS COMPILED AND WRITTEN BY A COMMITTEE DRAWN FROM EDUCATORS, HEALTH PHYSICISTS, MEMBERS OF INDUSTRY AND CONSERVATION GROUPS, AND ENVIRONMENTAL SCIENTISTS. TOPICS INCLUDE: THE INCREASING NEED FOR ELECTRICAL POWER, AND CURRENT AND PROPOSED METHODS FOR MEETING THIS NEED; NUCLEAR POWER AND FOSSIL-FUELED PLANTS, THEIR WASTES, AND HEALTH EFFECTS; CONSIDERATIONS FOR CHOOSING THE SITE FOR A NEW POWER PLANT; ENERGY CONSERVATION; AND ENVIRONMENTAL EFFECTS OF POWER GENERATION. THE APPENDICES INCLUDE A GLOSSARY OF TERMS, A BIBLIOGRAPHY FOR FURTHER STUDY, A DECISION-MAKING MODEL TO HELP THE READER ANALYZE THE INFORMATION RECEIVED, AND A BRIEF OUTLINE OF THE PROCEDURE THAT MUST BE FOLLOWED BY A UTILITY IN ORDER TO CONSTRUCT AND OPERATE A NUCLEAR POWER PLANT. (MH)

REPORT NUMBER: ERDA-69

CONTRACT NUMBER: AT-40-2-4167

AVAILABILITY: SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON, D.C. 20402 ($3.05)

INSTITUTION NAME: PENNSYLVANIA STATE DEPT. OF EDUCATION, HARRISBURG.

SPONSORING AGENCY NAME: ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION, WASHINGTON, D.C.

ACCESSION NUMBER: ED132026

CLEARINGHOUSE ACCESSION NUMBER: SE021548

PUBLICATION DATE: 75

TITLE: THE ENVIRONMENTAL IMPACT OF ELECTRICAL POWER GENERATION: NUCLEAR AND FOSSIL. TEACHER'S GUIDE.

INSTITUTION CODE: SYN71650

SPONSORING AGENCY CODE: 88813553

DESCRIPTOR: ADULT EDUCATION; *COLLEGE SCIENCE; CURRICULUM; *ELECTRICAL SYSTEMS; *ENERGY; ENERGY CONSERVATION; *ENVIRONMENT; HIGHER EDUCATION; SCIENCE EDUCATION; *TEACHING GUIDES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$2.06 PLUS POSTAGE.

DESCRIPTIVE NOTE: 29P.; FOR RELATED DOCUMENT, SEE SE 021 547

ISSUE: RIEAPR77

ABSTRACT: THIS TEACHER'S GUIDE ACCOMPANIES A COURSE CONCERNING THE NEED, ENVIRONMENTAL COSTS, AND BENEFITS OF ELECTRICAL POWER GENERATION. EACH CHAPTER OF THIS GUIDE CORRESPONDS TO A CHAPTER IN THE COURSE TEXT, AND INCLUDES THE FOLLOWING: A LIST OF BEHAVIORAL OBJECTIVES FOR THE CORRESPONDING CHAPTER, A LIST OF SUGGESTED ACTIVITIES, RECOMMENDED AUDIO-VISUAL AIDS, AND A LIST OF REFERENCE MATERIALS. AT THE END OF THE TEACHER'S GUIDE IS A DECISION-MAKING MODEL TO HELP THE READER ANALYZE THE INFORMATION RECEIVED. THE APPENDICES INCLUDE LABORATORY SAFETY RULES FOR WORKING WITH RADIOACTIVE SUBSTANCES AND AN ACHIEVEMENT TEST. (MH)

REPORT NUMBER: ERDA-70

CONTRACT NUMBER: AT-40-2-4167

AVAILABILITY: SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON, D.C. 20402 ($1.20)

INSTITUTION NAME: PENNSYLVANIA STATE DEPT. OF EDUCATION, HARRISBURG.

SPONSORING AGENCY NAME: ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION, WASHINGTON, D.C.

ACCESSION NUMBER: ED132084

CLEARINGHOUSE ACCESSION NUMBER: SO009621

PUBLICATION DATE: 75

TITLE: ENERGY CRISIS: LIBYA'S AND NIGERIA'S ROLE. RESOURCE PACKET.

INSTITUTION CODE: 88807712

DESCRIPTOR: AFRICAN AMERICAN STUDIES; AGRICULTURE; ANNOTATED BIBLIOGRAPHIES; *AREA STUDIES; CROSS CULTURAL STUDIES; DEVELOPING NATIONS; *ENERGY; *ENVIRONMENTAL EDUCATION; FEMALES; GEOGRAPHY; GOVERNMENT (ADMINISTRATIVE BODY); HISTORY; INSTRUCTIONAL MATERIALS; *LEARNING MODULES; LESSON PLANS; *NATURAL RESOURCES; SECONDARY EDUCATION;

SOCIAL PROBLEMS; SOCIAL STUDIES; TEACHING METHODS; URBANIZATION; *LIBYA; *NIGERIA

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 13P.; SEVERAL PAGES CONTAINING PUBLISHED ARTICLES OF THE ORIGINAL DOCUMENT ARE COPYRIGHTED AND THEREFORE NOT AVAILABLE. THEY ARE NOT INCLUDED IN THE PAGINATION

ISSUE: RIEAPR77

ABSTRACT: THIS RESOURCE PACKET CONTAINS PRACTICAL SUGGESTIONS AND RESOURCE MATERIALS TO HELP SECONDARY TEACHERS TEACH ABOUT LIBYA'S AND NIGERIA'S ROLES IN THE ENERGY CRISIS. STUDENTS BECOME ACQUAINTED WITH THE GOVERNMENTS AND CULTURES OF THE TWO COUNTRIES, EXAMINE THEIR SOCIAL PROBLEMS, AND LEARN HOW THE LIBYAN AND NIGERIAN GOVERNMENTS ARE USING MONEY FROM OIL SALES TO HELP THEIR PEOPLE. THE CLASSROOM MATERIALS SELECTED FOR THE PACKET PROVIDE A DIFFERENT POINT OF VIEW--THAT OF THE LIBYANS AND NIGERIANS THEMSELVES. THE AUTHORS WANT TO MAKE STUDENTS AWARE THAT U.S. VIEWPOINTS ARE NOT ALWAYS THE ONLY OR THE "RIGHT" ONES. BY USING THESE MATERIALS, STUDENTS WILL BECOME MORE CRITICAL OF THEIR OWN OPINIONS AND MORE QUESTIONING OF "FACTS" AS REPORTED IN THE NEWS MEDIA. STUDENTS VIEW 16MM FILMS; READ JOURNAL ARTICLES AND BOOKS; PARTICIPATE IN CLASSROOM DISCUSSIONS, WRITE TO OIL COMPANIES, AND DO INDEPENDENT RESEARCH. THE PACKET INCLUDES (1) TWO SELECT ANNOTATED BIBLIOGRAPHIES OF CLASSROOM AND TEACHER MATERIALS ON LIBYA AND NIGERIA; (2) TWO LESSON PLANS, "THE WOMEN OF LIBYA" AND "HOW DOES A GOVERNMENT USE ITS RESOURCES TO BRING MAXIMUM GAIN TO ITS CITIZENS?"; AND (3) SUGGESTIONS ON HOW TO USE THESE RESOURCE MATERIALS AND LESSON PLANS IN THE CLASSROOM. (AUTHOR/RM)

AVAILABILITY: AFRICAN-AMERICAN INSTITUTE, 833 UNITED NATIONS PLAZA, NEW YORK, NEW YORK 10017 ($3.00)

INSTITUTION NAME: AFRICAN-AMERICAN INST., NEW YORK, N.Y. SCHOOL SERVICES DIV.

ACCESSION NUMBER: ED132707

CLEARINGHOUSE ACCESSION NUMBER: EA008997

PUBLICATION DATE: 76

TITLE: ENERGY CONSERVATION GUIDELINES FOR PENNSYLVANIA SCHOOLS.

INSTITUTION CODE: SYN71650

DESCRIPTOR: *ENERGY CONSERVATION; ENGINEERING TECHNOLOGY; GUIDELINES; HEATING; HEAT RECOVERY; *SCHOOL DESIGN; *SCHOOL IMPROVEMENT; *SCHOOL MAINTENANCE; *PENNSYLVANIA

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$1.67 PLUS POSTAGE.

DESCRIPTIVE NOTE: 8P.

ISSUE: RIEMAY77

ABSTRACT: ENERGY CONSERVATION MEASURES THAT CAN BE EFFECTED IN THE ARCHITECTURE AND ENGINEERING OF NEW AND EXISTING SCHOOL BUILDINGS ARE LISTED. GUIDELINES ARE ALSO OFFERED FOR GENERAL SCHOOL OPERATION AND MAINTENANCE. (HLP)

INSTITUTION NAME: PENNSYLVANIA STATE DEPT. OF EDUCATION, HARRISBURG.

ACCESSION NUMBER: ED133124

CLEARINGHOUSE ACCESSION NUMBER: RC009603

PUBLICATION DATE: MAR 76

TITLE: THE PROSPECTS FOR NAVAJO TAXATION OF NON-INDIANS. LAKE POWELL RESEARCH PROJECT BULLETIN NUMBER 19, MARCH 1976.

PERSONAL AUTHOR: GOLDBERG, CAROLE E.

INSTITUTION CODE: BBB10350

DESCRIPTOR: *AMERICAN INDIANS; CAUCASIANS; COURT LITIGATION; *ECONOMIC DEVELOPMENT; ENERGY; FEDERAL GOVERNMENT; *FEDERAL LEGISLATION; RESERVATIONS (INDIAN); *STATE GOVERNMENT; *TAX EFFORT; *TRIBES; *NAVAJOS

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$2.06 PLUS POSTAGE.

DESCRIPTIVE NOTE: 41P.

ISSUE: RIEMAY77

ABSTRACT: IN THE PAST, COURTS HAVE DESCRIBED AMERICAN INDIAN SOVEREIGNTY IN WAYS THAT SUGGEST THE EXISTENCE OF POWER IN THE NAVAJO TRIBE TO TAX THE ACTIVITIES AND PROPERTY OF NON-INDIANS ON THEIR RESERVATION. THESE JUDICIAL STATEMENTS WERE MADE, HOWEVER, AT A TIME WHEN TRIBAL GOVERNMENTS WERE VIEWED AS TRANSITIONAL MECHANISMS FOR INDIAN ASSIMILATION AND CONTACT BETWEEN INDIANS AND NON-INDIANS ON THE RESERVATION WAS MINIMAL. CURRENT EFFORTS BY NON-INDIANS TO DEVELOP ENERGY RESOURCES ON THE NAVAJO RESERVATION WILL RESULT IN GREATER BENEFITS FOR THE NAVAJO PEOPLE IF THE NAVAJOS CAN EXERCISE TAXING POWER TO THE EXCLUSION OF THE STATES. SINCE LARGE-SCALE TAXATION ASSUMES AND PERMITS THE GROWTH OF A PERMANENT, COMPLEX TRIBAL GOVERNMENT, LEGAL DOCTRINE AND LEGISLATIVE SCHEMES MAY ALTER AS THE NAVAJOS ASSERT THEMSELVES. CHANGES IN THE DEFINITION OF TRIBAL SOVEREIGNTY AND THE EXTENT OF FEDERAL AND STATE LIMITATIONS ON TAXING AND OTHER TRIBAL POWERS SHOULD BE ANTICIPATED IF THE TRIBE BEGINS TAXING NON-INDIANS. NAVAJO TAXING POWER OVER NON-INDIANS SEEMS TO HAVE A FIRM BASIS IN CURRENT JUDICIAL DOCTRINE. THERE ARE FEW FEDERAL RESTRAINTS ON SUCH TRIBAL POWER, BUT FEDERAL RESTRAINTS MAY BE INCREASED VIA THE INDIAN CIVIL RIGHTS ACT, ESPECIALLY IN TERMS OF HOMOGENIZING TRIBAL WITH STATE/LOCAL GOVERNMENT WHEREIN FREEDOM FROM STATE TAXATION WOULD REQUIRE THE TRIBE TO ASSUME SOME STATE FUNCTIONS. (AUTHOR/JC)

CONTRACT NUMBER: NSF-AEN-72-03A-00-A03

AVAILABILITY: INSTITUTE OF GEOPHYSICS AND PLANETARY PHYSICS, UNIVERSITY OF CALIFORNIA, LOS ANGELES, CALIFORNIA 90024 ($2.00) PAYABLE TO THE REGENTS OF THE UNIVERSITY OF CALIFORNIA

INSTITUTION NAME: NATIONAL SCIENCE FOUNDATION, WASHINGTON, D.C. RANN PROGRAM.

ACCESSION NUMBER: ED133126

CLEARINGHOUSE ACCESSION NUMBER: RC009605

PUBLICATION DATE: JUN 76

TITLE: THE EFFECTS OF POWER PRODUCTION AND STRIP MINING ON LOCAL NAVAJO POPULATIONS. LAKE POWELL RESEARCH PROJECT BULLETIN NUMBER 22, JUNE 1976.

PERSONAL AUTHOR: CALLAWAY, DONALD G.; AND OTHERS

INSTITUTION CODE: BBB10350

DESCRIPTOR: ACADEMIC ACHIEVEMENT; AGE; *AMERICAN INDIANS; COMPARATIVE ANALYSIS; DEMOGRAPHY; *ECONOMIC DEVELOPMENT; EMPLOYMENT; *INCOME; LIFE STYLE; *RESERVATIONS (INDIAN); RURAL AREAS; RURAL TO URBAN MIGRATION; SKILLED LABOR; *SOCIAL CHANGE; SOCIOECONOMIC STATUS; SURVEYS; *ENERGY PRODUCTION; EXTRACTIVE INDUSTRIES; LAKE POWELL; *NAVAJOS

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$10.03 PLUS POSTAGE.

DESCRIPTIVE NOTE: 181P.

ISSUE: RIEMAY77

ABSTRACT: IN AN EFFORT TO EVALUATE THE IMPACT OF THE 1972-73 NAVAJO GENERATING STATION AT PAGE, ARIZONA AND THE STRIP MINE AT BLACK MESA ON THE NAVAJO RESERVATION, AREAS ADJACENT TO EACH OF THESE OPERATIONS WERE SURVEYED (N=134 AND 60 RESPECTIVELY) AND COMPARED WITH TWO CONTROL POPULATIONS (N=60 FROM THE RURAL AREA OF RED LAKE AND 58 FROM THE WAGEWORK AREA OF TUBA CITY), ATTEMPTING TO DIFFERENTIATE BETWEEN REAL LIFESTYLE TRANSFORMATIONS WITHIN THE AFFECTED AREAS AND RURAL TO URBAN MIGRATION. COMPARISONS WERE MADE IN TERMS OF: (1) DEMOGRAPHY (AGE AND EDUCATION OF HOUSEHOLD HEADS AND SPOUSES; MARRIAGE PATTERNS; RELIGIOUS AFFILIATION; HOUSEHOLD SIZE AND COMPOSITION; LENGTH OF RESIDENCE; LOCATION OF PRIOR RESIDENCE); (2) SOCIAL ORGANIZATION (CAMP SIZE AND COMPOSITION; COMMUNITY RESIDENCE AFTER MARRIAGE; LIVESTOCK OWNERSHIP AND PATTERNS OF COOPERATION BEYOND THE CAMP; HAULING WOOD AND WATER; COOPERATIVE ARRANGEMENTS FOR HERDING SHEEP; STOCK PERMITS); (3) ECONOMICS (INCOME; WAGE, UNEARNED, LIVESTOCK, AGRICULTURAL, AND CRAFT INCOME; MAJOR EXPENSES; COMMERCIAL TRANSACTIONS). RESULTS INDICATED: INCOMES, LEVELS OF EMPLOYMENT, AND LEVELS OF EDUCATION WERE ALL HIGHER IN THE IMPACT AREA AROUND LAKE POWELL; WHILE LEVELS OF UNEMPLOYMENT AND WELFARE EXPENDITURES WERE LOWER; HOUSEHOLD HEADS WERE YOUNGER AND FAMILY GROUPS WERE SMALLER IN THE IMPACT AREAS; RURAL POPULATIONS WERE UNAFFECTED; OBSERVED DIFFERENCES WERE NOT SO MUCH THE RESULT OF TRANSFORMATION AS THE EFFECT OF MIGRATION OF YOUNGER, MORE SKILLED WORKERS. (JC)

CONTRACT NUMBER: NSF-GI-34832

INSTITUTION NAME: NATIONAL SCIENCE FOUNDATION, WASHINGTON, D.C. RANN PROGRAM.

ACCESSION NUMBER: ED133162

CLEARINGHOUSE ACCESSION NUMBER: SE021477

PUBLICATION DATE: 76

TITLE: ENERGY FUTURES... PROJECT ECOLOGY ELE PAK, PARR PAK.

PERSONAL AUTHOR: PARR, DONALD

INSTITUTION CODE: ZBQ31880

SPONSORING AGENCY CODE: BBB00077

DESCRIPTOR: CONSERVATION EDUCATION; *ENERGY; ENVIRONMENT; ENVIRONMENTAL EDUCATION; *INSTRUCTIONAL MATERIALS; JUNIOR HIGH SCHOOL STUDENTS; *NATURAL RESOURCES; *SECONDARY SCHOOL SCIENCE; *UNITS OF STUDY (SUBJECT FIELDS); ELEMENTARY SECONDARY EDUCATION ACT TITLE III; ESEA TITLE III

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$3.50 PLUS POSTAGE.

DESCRIPTIVE NOTE: 58P.; FOR RELATED DOCUMENTS, SEE SE 021 438-478; CONTAINS OCCASIONAL LIGHT TYPE

ISSUE: RIEMAY77

ABSTRACT: THIS IS ONE OF A SERIES OF UNITS FOR ENVIRONMENTAL EDUCATION DEVELOPED BY THE HIGHLINE PUBLIC SCHOOLS. THIS UNIT ON ENERGY IS DESIGNED FOR JUNIOR HIGH SCHOOL SCIENCE STUDENTS. THE 11 CONCEPTS OF THE UNIT HAVE BEEN DEVELOPED INTO 11 LESSONS THAT SHOULD TAKE FROM TWO TO THREE WEEKS TO COMPLETE. EACH LESSON INCLUDES THE CONCEPT OF THE LESSON, MATERIALS NEEDED, NOTES TO THE TEACHER, PROCEDURE, EVALUATIVE ACTIVITIES, AND SUGGESTED ADDITIONAL ACTIVITIES. (RH)

AVAILABILITY: HIGHLINE PUBLIC SCHOOLS, INSTRUCTIONAL DIVISION, PROJECT ECOLOGY ESEA TITLE III, BILL GUISE, DIRECTOR, 15675 AMBAUM BLVD., S.W., SEATTLE, WA 98166 ($2.50)

INSTITUTION NAME: HIGHLINE PUBLIC SCHOOLS, SEATTLE, WASH.

SPONSORING AGENCY NAME: BUREAU OF ELEMENTARY AND SECONDARY EDUCATION (DHEW/OE), WASHINGTON, D.C.

ACCESSION NUMBER: ED133172

CLEARINGHOUSE ACCESSION NUMBER: SE021714

PUBLICATION DATE: 75

TITLE: CREATING ENERGY CHOICES FOR THE FUTURE. A SUMMARY OF THE NATIONAL PLAN FOR ENERGY RESEARCH, DEVELOPMENT, AND DEMONSTRATION.

INSTITUTION CODE: BBB13553

DESCRIPTOR: *ENERGY; *ENERGY CONSERVATION; *FEDERAL PROGRAMS; *NATURAL RESOURCES; POLICY FORMATION; *RESEARCH; *WORLD PROBLEMS

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$2.06 PLUS POSTAGE.

DESCRIPTIVE NOTE: 38P.

ISSUE: RIEMAY77

ABSTRACT: THIS BOOKLET, WHICH HIGHLIGHTS AND EXPLAINS THE 1975 NATIONAL ENERGY PLAN, IS INTENDED TO IMPROVE THE GENERAL PUBLIC'S UNDERSTANDING OF U.S. ENERGY POLICY. SECTIONS IN THE PUBLICATION INCLUDE: (1) THE ENERGY PROBLEM AND THE NEED FOR PLANNING; (2) BASIC PRINCIPLES OF THE PLAN AND HOW THEY APPLY; (3) OVERCOMING THE OIL AND GAS SHORTAGE; (4) THE IMPORTANCE OF TIME; (5) NEAR-TERM: NOW-1985; (6) MIDTERM: 1985-2000; (7) LONG-TERM: BEYOND 2000; (8) THE IMPORTANCE OF ENVIRONMENTAL RESEARCH, DEVELOPMENT, AND DEMONSTRATION; (9) THE ROLE OF THE FEDERAL GOVERNMENT IN ENERGY DEVELOPMENT; AND (10) NEW DIRECTIONS. (RH)

INSTITUTION NAME: ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION, WASHINGTON, D.C.

ACCESSION NUMBER: ED133173

CLEARINGHOUSE ACCESSION NUMBER: SE021715

PUBLICATION DATE: 75

TITLE: ENERGY AND THE ENVIRONMENT. CITIZENS' WORKSHOP HANDBOOK.

INSTITUTION CODE: BBB12944

DESCRIPTOR: *ENERGY; *ENERGY CONSERVATION; *ENVIRONMENT; *INSTRUCTIONAL MATERIALS; *NATURAL RESOURCES; RESOURCE MATERIALS; *WORLD PROBLEMS

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$2.06 PLUS POSTAGE.

DESCRIPTIVE NOTE: 39P.

ISSUE: RIEMAY77

ABSTRACT: THIS PUBLICATION WAS PRODUCED FOR THE CITIZENS' WORKSHOP PROGRAM ON ENERGY AND THE ENVIRONMENT. INCLUDED IN THIS MONOGRAPH ARE SECTIONS ON: (1) ENERGY AND THE ENVIRONMENT; (2) THE ENERGY PROBLEM (AMOUNT REMAINING, HOW IT IS USED); (3) ENVIRONMENTAL PROBLEMS OF ENERGY USE; AN ENERGY-ENVIRONMENTAL QUIZ; (4) ENERGY FOR THE FUTURE (TYPES, SOURCES, AMOUNT AVAILABLE); AND (5) SOURCES OF FURTHER INFORMATION. THE MATERIALS EMPHASIZE THE COMPLEXITIES OF THE FACTORS INVOLVED IN ENERGY PROBLEMS AND THE NEED TO TAKE POSITIVE ACTION TOWARD ENERGY CONSERVATION AND THE DEVELOPMENT OF ALTERNATIVE ENERGY SOURCES. (RH)

INSTITUTION NAME: ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION, OAK RIDGE, TENN.

ACCESSION NUMBER: ED133192

CLEARINGHOUSE ACCESSION NUMBER: SE021768

PUBLICATION DATE: SEP 76

TITLE: ENERGY EDUCATION MATERIALS INVENTORY (E.E.M.I.). PART ONE: PRINT MATERIALS.

INSTITUTION CODE: BBB14046

SPONSORING AGENCY CODE: BBB12650

DESCRIPTOR: CURRICULUM; ELEMENTARY SCHOOL SCIENCE; *ELEMENTARY SECONDARY EDUCATION; *ENERGY; *INSTRUCTIONAL MATERIALS; REFERENCE MATERIALS; SCIENCE EDUCATION; SECONDARY SCHOOL SCIENCE; SOCIAL STUDIES; *TEACHING GUIDES

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 102P.; FOR RELATED DOCUMENTS, SEE SE 021 769-772; NOT AVAILABLE IN HARD COPY DUE TO MARGINAL LEGIBILITY OF ORIGINAL DOCUMENT

ISSUE: RIEMAY77

ABSTRACT: THIS PUBLICATION IS ONE OF A SIX-PART INVENTORY OF ENERGY EDUCATION MATERIALS. INCLUDED IN THIS PART IS A LISTING OF PRINT MATERIALS, INCLUDING THE FOLLOWING: TEACHER'S GUIDES, CURRICULUM GUIDES, DITTO MASTERS, TEXTBOOKS, PAMPHLETS, AND POSTERS. FOR EACH OF THE MATERIALS LISTED, THE FOLLOWING INFORMATION IS INCLUDED WHEN AVAILABLE: (1) TITLE; (2) AUTHOR; (3) AVAILABILITY; (4) COST; (5) GRADE LEVEL; (6) RELATED MATERIALS; AND (7) EVALUATION OF THE MATERIAL. (RH)

CONTRACT NUMBER: CR-04-60565-00

INSTITUTION NAME: ENERGY AND MAN'S ENVIRONMENT INC., PORTLAND.

SPONSORING AGENCY NAME: FEDERAL ENERGY ADMINISTRATION, WASHINGTON, D.C.

ACCESSION NUMBER: ED133193

CLEARINGHOUSE ACCESSION NUMBER: SE021769

PUBLICATION DATE: SEP 76

TITLE: ENERGY EDUCATION MATERIALS INVENTORY (E.E.M.I.). PART TWO: NON-PRINT MATERIALS, PART ONE.

INSTITUTION CODE: BBB14046

SPONSORING AGENCY CODE: BBB12650

DESCRIPTOR: *AUDIOVISUAL AIDS; ELEMENTARY SCHOOL SCIENCE; *ELEMENTARY SECONDARY EDUCATION; *ENERGY; *FILMS; *INSTRUCTIONAL MATERIALS; SCIENCE EDUCATION; SECONDARY SCHOOL SCIENCE; SOCIAL STUDIES; *TEACHING GUIDES

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 75P.; FOR RELATED DOCUMENTS, SEE SE 021 768-772; NOT AVAILABLE IN HARD COPY DUE TO MARGINAL LEGIBILITY OF ORIGINAL DOCUMENT

ISSUE: RIEMAY77

ABSTRACT: THIS PUBLICATION IS ONE OF A SIX-PART INVENTORY OF ENERGY EDUCATION MATERIALS. INCLUDED IN THIS PART IS A LISTING OF NON-PRINT MATERIALS, INCLUDING THE FOLLOWING: FILMS, FILMSTRIPS, SLIDES, TRANSPARENCIES, AUDIO-TAPES, AND RECORDS. FOR EACH OF THE MATERIALS LISTED, THE FOLLOWING INFORMATION IS INCLUDED WHEN AVAILABLE: (1) TITLE; (2) AUTHOR; (3) AVAILABILITY; (4) COST; (5) GRADE LEVEL; (6) RELATED MATERIALS; AND (7) EVALUATION OF THE MATERIAL. (RH)

CONTRACT NUMBER: CR-04-60565-00

INSTITUTION NAME: ENERGY AND MAN'S ENVIRONMENT INC., PORTLAND.

SPONSORING AGENCY NAME: FEDERAL ENERGY ADMINISTRATION, WASHINGTON, D.C.

ACCESSION NUMBER: ED133194

CLEARINGHOUSE ACCESSION NUMBER: SE021770

PUBLICATION DATE: SEP 76

TITLE: ENERGY EDUCATION MATERIALS INVENTORY (E.E.M.I.). PART THREE: NON-PRINT MATERIALS, PART TWO: 16 MM FILMS.

INSTITUTION CODE: BBB14046

SPONSORING AGENCY CODE: BBB12650

DESCRIPTOR: *AUDIOVISUAL AIDS; ELEMENTARY SCHOOL SCIENCE; *ELEMENTARY SECONDARY EDUCATION; *ENERGY; *FILMS; *INSTRUCTIONAL MATERIALS; SCIENCE EDUCATION; SECONDARY SCHOOL SCIENCE; SOCIAL STUDIES; *TEACHING GUIDES

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 66P.; FOR RELATED DOCUMENTS, SEE SE 021 768-772; NOT AVAILABLE IN HARD COPY DUE TO MARGINAL LEGIBILITY OF ORIGINAL DOCUMENT

ISSUE: RIEMAY77

ABSTRACT: THIS PUBLICATION IS ONE OF A SIX-PART INVENTORY OF ENERGY EDUCATION MATERIALS. INCLUDED IN THIS PART IS A LISTING OF 16MM FILMS. FOR EACH OF THE MATERIALS LISTED, THE FOLLOWING INFORMATION IS INCLUDED WHEN AVAILABLE: (1) TITLE; (2) AUTHOR; (3) AVAILABILITY; (4) COST; (5) GRADE LEVEL; (6) RELATED MATERIALS, AND (7) EVALUATION OF THE MATERIAL. (RH)

CONTRACT NUMBER: CR-04-60565-00

INSTITUTION NAME: ENERGY AND MAN'S ENVIRONMENT INC., PORTLAND.

SPONSORING AGENCY NAME: FEDERAL ENERGY ADMINISTRATION, WASHINGTON, D.C.

ACCESSION NUMBER: ED133195

CLEARINGHOUSE ACCESSION NUMBER: SE021771

PUBLICATION DATE: SEP 76

TITLE: ENERGY EDUCATION MATERIALS INVENTORY (E.E.M.I.). PART FOUR: KITS, GAMES & MISCELLANEOUS CURRICULA.

INSTITUTION CODE: BBB14046

SPONSORING AGENCY CODE: BBB12650

DESCRIPTOR: AUDIOVISUAL AIDS; ELEMENTARY SCHOOL SCIENCE; *ELEMENTARY SECONDARY EDUCATION; *ENERGY; GAMES; *INSTRUCTIONAL MATERIALS; LEARNING MODULES; REFERENCE MATERIALS; SCIENCE EDUCATION; SECONDARY SCHOOL SCIENCE; SOCIAL STUDIES; *TEACHING GUIDES

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 25P.; FOR RELATED DOCUMENTS, SEE SE 021 768-772; NOT AVAILABLE IN HARD COPY DUE TO MARGINAL LEGIBILITY OF ORIGINAL DOCUMENT

ISSUE: RIEMAY77

ABSTRACT: THIS PUBLICATION IS ONE OF A SIX-PART INVENTORY OF ENERGY EDUCATION MATERIALS. INCLUDED IN THIS PART IS A LISTING OF KITS, GAMES, AND MISCELLANEOUS CURRICULA. FOR EACH OF THE MATERIALS LISTED THE FOLLOWING ITEMS ARE INCLUDED WHEN AVAILABLE: (1) TITLE; (2) AUTHOR; (3) AVAILABILITY; (4) COST; (5) GRADE LEVEL; (6) RELATED MATERIALS; AND (7) EVALUATION OF THE MATERIAL. MATERIALS LISTED IN THIS REFERENCE INCLUDE BOTH PRINT AND NON-PRINT ITEMS FOR TEACHERS AND STUDENTS. (RH)

CONTRACT NUMBER: CR-04-60565-00

INSTITUTION NAME: ENERGY AND MAN'S ENVIRONMENT INC., PORTLAND.

SPONSORING AGENCY NAME: FEDERAL ENERGY ADMINISTRATION, WASHINGTON, D.C.

ACCESSION NUMBER: ED133196

CLEARINGHOUSE ACCESSION NUMBER: SE021772

PUBLICATION DATE: SEP 76

TITLE: ENERGY EDUCATION MATERIALS INVENTORY (E.E.M.I.). PART FIVE: REFERENCE SOURCES.

INSTITUTION CODE: BB814040

SPONSORING AGENCY CODE: BB812650

DESCRIPTOR: *BIBLIOGRAPHIES; EDUCATIONAL PROGRAMS; ELEMENTARY SCHOOL SCIENCE; *ELEMENTARY SECONDARY EDUCATION; *ENERGY; *INSTRUCTIONAL MATERIALS; *REFERENCE MATERIALS; SCIENCE EDUCATION; SECONDARY SCHOOL SCIENCE; SOCIAL STUDIES

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 42P.; FOR RELATED DOCUMENTS, SEE SE 021 768-772; NOT AVAILABLE IN HARD COPY DUE TO MARGINAL LEGIBILITY OF ORIGINAL DOCUMENT

ISSUE: RIEMAY77

ABSTRACT: THIS PUBLICATION IS ONE OF A SIX-PART INVENTORY OF ENERGY EDUCATION MATERIALS. INCLUDED IN THIS PART IS A LISTING OF BIBLIOGRAPHIES, COMPUTER SOURCES OF INFORMATION, DIRECTORIES, EDUCATIONAL PROGRAMS, FUNDED PROJECTS, PERIODICALS, AND JOURNALS. FOR EACH OF THE MATERIALS LISTED, THE FOLLOWING INFORMATION IS INCLUDED WHEN AVAILABLE: (1) TITLE; (2) AUTHOR; (3) AVAILABILITY; (4) COST; (5) GRADE LEVEL; (6) RELATED MATERIALS; AND (7) EVALUATION OF THE MATERIAL. (RH)

CONTRACT NUMBER: CR-04-60565-00

INSTITUTION NAME: ENERGY AND MAN'S ENVIRONMENT INC., PORTLAND.

SPONSORING AGENCY NAME: FEDERAL ENERGY ADMINISTRATION, WASHINGTON, D.C.

ACCESSION NUMBER: ED133223

CLEARINGHOUSE ACCESSION NUMBER: SE021898

PUBLICATION DATE: 75

TITLE: PRIORITY ONE: ENVIRONMENT. FINAL REPORT ON THE PROJECT'S DEVELOPMENT AND EVALUATION, 1970-1975.

PERSONAL AUTHOR: MCCUTCHEON, PATRICIA, ED.

INSTITUTION CODE: BB800990

SPONSORING AGENCY CODE: BB800077; BB806508

DESCRIPTOR: AIR POLLUTION CONTROL; BIOLOGY; *ELEMENTARY SECONDARY EDUCATION; ENERGY; *ENVIRONMENT; *ENVIRONMENTAL EDUCATION; EVALUATION; *INSTRUCTIONAL MATERIALS; NATURAL RESOURCES; POLLUTION; *PROGRAM DESCRIPTIONS; UNITS OF STUDY (SUBJECT FIELDS); WATER RESOURCES; ELEMENTARY SECONDARY EDUCATION ACT TITLE III; ESEA TITLE III

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 17P.; FOR RELATED DOCUMENTS, SEE SE 021 699-906; NOT AVAILABLE IN HARD COPY DUE TO COPYRIGHT RESTRICTIONS

ISSUE: RIEMAY77

ABSTRACT: DESCRIBED ARE THE MATERIALS DEVELOPED BY PRIORITY ONE: ENVIRONMENT, A PROJECT OF THE TOWNSHIP OF UNION PUBLIC SCHOOLS, UNION, NEW JERSEY. THE PROGRAM WAS DESIGNED TO DEVELOP MULTIDISCIPLINARY AND MULTIMEDIA MATERIALS FOR GRADES 1-12. THIS PUBLICATION DESCRIBES THE DEVELOPMENT PROCESS. THE 13 MULTIMEDIA UNITS, THE EVALUATION PROCESS, COST EFFECTIVENESS DATA, AND INSERVICE REQUIRED. THE DATA INDICATE STUDENTS STUDYING THE MATERIALS DO SIGNIFICANTLY BETTER ON TESTS RELATED TO THE PROGRAM THAN CONTROL GROUPS, KITS LAST ABOUT FOUR YEARS, CONSUMABLE COSTS ARE LOW, AND INSERVICE TRAINING NEEDED TO UTILIZE THE PROGRAM IS MINIMAL. (RH)

INSTITUTION NAME: UNION TOWNSHIP BOARD OF EDUCATION, N.J.

SPONSORING AGENCY NAME: BUREAU OF ELEMENTARY AND SECONDARY EDUCATION (DHEW/OE); WASHINGTON, D.C.; NEW JERSEY STATE DEPT. OF EDUCATION, TRENTON. DIV. OF RESEARCH, PLANNING, AND EVALUATION.

ACCESSION NUMBER: ED133228

CLEARINGHOUSE ACCESSION NUMBER: SE021903

PUBLICATION DATE: 75

TITLE: PRIORITY ONE: ENVIRONMENT. THE ENERGY CHALLENGE.

PERSONAL AUTHOR: AUGIS, LYNNE; AND OTHERS

INSTITUTION CODE: BB800990

SPONSORING AGENCY CODE: BB800077; BB806508

DESCRIPTOR: *ENERGY; *ENVIRONMENT; ENVIRONMENTAL EDUCATION; *INSTRUCTIONAL MATERIALS; *NATURAL RESOURCES; *SECONDARY EDUCATION; *UNITS OF STUDY (SUBJECT FIELDS); WASTES; ELEMENTARY SECONDARY EDUCATION ACT TITLE III; ESEA TITLE III

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 40P.; FOR RELATED DOCUMENTS, SEE SE 021 898-906; NOT AVAILABLE IN HARD COPY DUE TO COPYRIGHT RESTRICTIONS

ISSUE: RIEMAY77

ABSTRACT: THIS UNIT IS ONE OF A SERIES IN ENVIRONMENTAL EDUCATION FOR GRADES 1-12. THE UNIT IS DESIGNED TO BE USED WITH SECONDARY SCHOOL STUDENTS AND INCLUDES THE FOLLOWING SECTIONS: (1) PREFACE; (2) FOODS, FUELS, AND YOU; (3) BLACKOUT IN THE CITY; (4) CONSERVATION AND EFFICIENCY; (5) OUR PRESENT SOURCES; (6) THE OIL CRISIS; (7) THE NUCLEAR CONTROVERSY; (8) TAPPING NEW RESOURCES; (9) DEVELOPING OTHER WAYS; AND (10) SCHEDULE SHEET FOR THE UNIT. REFERENCES TO AUDIOVISUAL AIDS, WORKSHEETS, AND ACTIVITIES ARE MADE; THESE MATERIALS ARE NOT INCLUDED WITH THIS PUBLICATION, BUT MAY BE PURCHASED. THESE MATERIALS HAVE BEEN VALIDATED AS SUCCESSFUL, COST-EFFECTIVE, AND EXPORTABLE BY THE STANDARDS AND THE GUIDELINES OF THE U.S. OFFICE OF EDUCATION. (RH)

INSTITUTION NAME: UNION TOWNSHIP BOARD OF EDUCATION, N.J.

SPONSORING AGENCY NAME: BUREAU OF ELEMENTARY AND SECONDARY EDUCATION (DHEW/OE); WASHINGTON, D.C.; NEW JERSEY STATE DEPT. OF EDUCATION, TRENTON. DIV. OF RESEARCH, PLANNING, AND EVALUATION.

ACCESSION NUMBER: ED133229

CLEARINGHOUSE ACCESSION NUMBER: SE021904

PUBLICATION DATE: 75

TITLE: PRIORITY ONE: ENVIRONMENT. THE ENERGY CHALLENGE, TEACHER'S GUIDE.

PERSONAL AUTHOR: AUGIS, LYNNE; AND OTHERS

INSTITUTION CODE: BB800990

SPONSORING AGENCY CODE: BB800077; BB806508

DESCRIPTOR: *ENERGY; *ENVIRONMENT; *ENVIRONMENTAL EDUCATION; INSTRUCTIONAL MATERIALS; NATURAL RESOURCES; *SECONDARY EDUCATION; *TEACHING GUIDES; WASTES; ELEMENTARY SECONDARY EDUCATION ACT TITLE III; ESEA TITLE III

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 32P.; FOR RELATED DOCUMENTS, SEE SE 021 898-906; NOT AVAILABLE IN HARD COPY DUE TO COPYRIGHT RESTRICTIONS

ISSUE: RIEMAY77

ABSTRACT: MATERIAL FOR THIS TEACHER'S GUIDE INCLUDES: (1) AN INTRODUCTION TO THE UNIT; (2) A DISCUSSION OF THE SECTIONS OF THE UNIT; (3) INSTRUCTIONAL OBJECTIVES; (4) SUGGESTIONS ON USE OF FILMSTRIPS, WORKSHEETS, REFERENCE MATERIALS, AND ACTIVITY CARDS; AND (5) AN OUTLINE OF THE UNIT. THESE MATERIALS HAVE BEEN VALIDATED AS SUCCESSFUL, COST-EFFECTIVE, AND EXPORTABLE BY THE STANDARDS AND GUIDELINES OF THE U.S. OFFICE OF EDUCATION. (RH)

INSTITUTION NAME: UNION TOWNSHIP BOARD OF EDUCATION, N.J.

SPONSORING AGENCY NAME: BUREAU OF ELEMENTARY AND SECONDARY EDUCATION (DHEW/OE); WASHINGTON, D.C.; NEW JERSEY STATE DEPT. OF EDUCATION, TRENTON. DIV. OF RESEARCH, PLANNING, AND EVALUATION.

ACCESSION NUMBER: ED133260

CLEARINGHOUSE ACCESSION NUMBER: SO009673

PUBLICATION DATE: 76

TITLE: TECHNOLOGY AND THE NEW LIBERAL ARTS. MONOGRAPH SERIES, 1.

PERSONAL AUTHOR: DEVORE, PAUL W.

INSTITUTION CODE: BB814025

DESCRIPTOR: CITIZENSHIP RESPONSIBILITY; CULTURAL AWARENESS; DECISION MAKING; DEMOCRATIC VALUES; ECONOMIC DEVELOPMENT; *EDUCATIONAL IMPROVEMENT; EDUCATIONAL OBJECTIVES; EDUCATIONAL TRENDS; ENERGY; ENVIRONMENTAL CRITERIA; FUTURES (OF SOCIETY); GLOBAL APPROACH; HIGHER EDUCATION; *HUMANIZATION; *INDUSTRIAL TECHNOLOGY; *LIBERAL ARTS; PROBLEM SOLVING; *RELEVANCE (EDUCATION); SOCIAL ATTITUDES; SOCIAL PROBLEMS; SOCIAL RESPONSIBILITY; SOCIOECONOMIC INFLUENCES; VALUES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$1.67 PLUS POSTAGE.

DESCRIPTIVE NOTE: 20P.

ISSUE: RIEMAY77

ABSTRACT: THE AMERICAN EDUCATIONAL SYSTEM INCREASINGLY SHAPES INDIVIDUALS TO FIT A PRODUCTION-CONSUMPTION SYSTEM. MOST EDUCATORS BELIEVE THAT EDUCATION SHOULD PROVIDE CAREER TRAINING AND THE BASIS FOR ECONOMIC ADVANCEMENT, RATHER THAN REFLECT ON PAST EVENTS. THE QUESTIONS--WHO WE ARE, WHY WE ARE HERE, AND WHERE WE ARE GOING--ARE SELDOM DISCUSSED IN PUBLIC EDUCATION TODAY. CONTINUED TECHNOLOGICAL DEVELOPMENT HAS RESULTED IN GLOBAL CONCERNS, INCLUDING ACCELERATING INDUSTRIALIZATION, RAPID POPULATION GROWTH, WIDESPREAD MALNUTRITION, DEPLETION OF NONRENEWABLE NATURAL RESOURCES, AND DETERIORATING ENVIRONMENT. THESE CONCERNS HAVE CREATED A NEW KIND OF AWARENESS THAT TECHNOLOGY AND ITS IMPACT ARE IRREVERSIBLE. INCREASINGLY, THERE IS THE REALIZATION THAT IF PRESENT TRENDS CONTINUE, SELF-DESTRUCTION FROM OVERPOPULATION AND HIGH ENERGY CONSUMPTION IS ASSURED. THE IMPLICATION IS THAT INCREASED LIBERAL ARTS KNOWLEDGE WILL DIRECTLY ENHANCE A SOCIETY'S CAPACITY TO MAKE CHOICES, DECIDE GOALS, AND PRODUCE DESIRED CHANGES. THIS ACCEPTANCE OF A NEW LIBERAL ARTS PERSPECTIVE, IN TURN, WOULD INCREASE THE POTENTIAL OF EDUCATION AS A CREATION OF INTELLIGENT,

CAPABLE BEINGS. (AUTHOR/DB)

AVAILABILITY: WAGNER RESOURCE CENTER, DEPARTMENT OF INDUSTRIAL TECHNOLOGY, UNIVERSITY OF NORTHERN IOWA, CEDAR FALLS, IOWA 50613 (FREE)

INSTITUTION NAME: UNIVERSITY OF NORTHERN IOWA, CEDAR FALLS. DEPT. OF INDUSTRIAL TECHNOLOGY.

ACCESSION NUMBER: ED133296

CLEARINGHOUSE ACCESSION NUMBER: SO009770

PUBLICATION DATE: NOV 76

TITLE: FUNDAMENTALS OF ENVIRONMENTAL EDUCATION. REPORT.

SPONSORING AGENCY CODE: BBB10241

DESCRIPTOR: *BIOLOGY; *ECOLOGY; ELEMENTARY SECONDARY EDUCATION; ENERGY; *ENVIRONMENTAL EDUCATION; ENVIRONMENTAL INFLUENCES; *FUNDAMENTAL CONCEPTS; GLOBAL APPROACH; HIGHER EDUCATION; *HUMAN GEOGRAPHY; *INTERDISCIPLINARY APPROACH; WORLD PROBLEMS

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$2.06 PLUS POSTAGE.

DESCRIPTIVE NOTE: 30P.; THIS DOCUMENT IS A REPLACEMENT FOR ED 107 527

ISSUE: RIEMAY77

ABSTRACT: AN OUTLINE OF FUNDAMENTAL DEFINITIONS, RELATIONSHIPS, AND HUMAN RESPONSIBILITIES RELATED TO ENVIRONMENT PROVIDES A BASIS FROM WHICH A VARIETY OF MATERIALS, PROGRAMS, AND ACTIVITIES CAN BE DEVELOPED. THE OUTLINE CAN BE USED IN ELEMENTARY, SECONDARY, HIGHER EDUCATION, OR ADULT EDUCATION PROGRAMS. THE FRAMEWORK IS BASED ON PRINCIPLES OF THE SCIENCE OF ECOLOGY AND INTEGRATES RELEVANT CONSTRUCTS FROM THE SOCIAL, BEHAVIORAL, PHYSICAL, BIOLOGICAL, ENVIRONMENTAL DESIGN, AND LEGAL DISCIPLINES. SECTION ONE STATES THE NATURAL PRINCIPLES ABOUT THE OPERATION OF ALL EARTH'S ECOSYSTEMS, MAN-CREATED AND NATURAL. THIS INCLUDES DISCUSSION OF THE SUPPLY AND USE OF ENERGY BY COMPONENT PARTS WITHIN THE ECOSPHERE. SECTION TWO DISCUSSES FUNDAMENTALS ABOUT THE FUNCTIONING OF THE HUMAN SPECIES IN THE EARTH'S ECOSYSTEMS--HOW HUMANS AFFECT AND ARE AFFECTED BY ECOSYSTEMS AND HOW HUMANS ARE ACCOUNTABLE FOR THEIR EFFECTS ON ECOSYSTEMS. THE THIRD SECTION DESCRIBES PROCESSES, METHODS, AND TOOLS FOR USING THE FUNDAMENTALS TO MANAGE THE HUMAN ACTIVITIES IN THE EARTH'S ECOSYSTEMS. SPECIFIC U.S. LAWS AND INTERNATIONAL ENVIRONMENTAL POLICIES ARE CITED. SECTION FOUR PROVIDES EXAMPLES OF BROAD QUESTIONS THAT INDIVIDUALS AND MULTINATIONAL GROUPS MUST ADDRESS IN ORDER TO PRESERVE THE QUALITY OF HUMAN LIFE ON EARTH. THESE ISSUES INCLUDE FOOD PRODUCTION CAPACITY AND LAND SUITABILITY PLANNING. (AUTHOR/AV)

SPONSORING AGENCY NAME: OFFICE OF THE ASSISTANT SECRETARY FOR EDUCATION (DHEW), WASHINGTON, D.C.

ACCESSION NUMBER: ED133440

CLEARINGHOUSE ACCESSION NUMBER: CE007800

PUBLICATION DATE: 76

TITLE: MATERIALS TECHNOLOGY: 200 YEARS AND THE FUTURE.

PERSONAL AUTHOR: YADON, JAMES N.; STEEB, RALPH V.

DESCRIPTOR: EDUCATION; EDUCATIONAL RESPONSIBILITY; ENERGY; HISTORICAL REVIEWS; *INDUSTRIAL TECHNOLOGY; MATTER; *PRODUCTION TECHNIQUES; SPEECHES; *TECHNOLOGICAL ADVANCEMENT

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$1.67 PLUS POSTAGE.

DESCRIPTIVE NOTE: 21P.; PAPER PRESENTED AT THE AMERICAN INDUSTRIAL ARTS ASSOCIATION CONFERENCE (DES MOINES, IOWA, APRIL 18-23, 1976)

ISSUE: RIEJUN77

ABSTRACT: FOCUS IN THIS PAPER IS ON THE IMPORTANCE OF MATERIALS TECHNOLOGY, THE MATTER AND ENERGY CRISES, AND THE INTERRELATEDNESS OF OUR INCREASING NEED FOR MATERIALS, AND THE IMPLICATIONS FOR EDUCATION. FOLLOWING A SHORT HISTORY OF WHAT MATERIALS HAVE DONE FOR MAN AND WHAT MAN HAS DONE WITH MATERIALS, PARTICULARLY IN THE DEVELOPMENT OF VARIOUS METALS AND COMPOSITES, FROM THE EARLIEST RECORDS TO THE SPACE AGE, THE AUTHOR NOTES THAT IT WAS MAINLY THROUGH THE RISE OF EDUCATION IN THIS COUNTRY THAT SCIENCE AND TECHNOLOGY GREW TO HAVE A PROFOUND EFFECT ON THE NATIONAL ECONOMY AND THAT THE RAPID DEVELOPMENT OF MATERIALS TECHNOLOGY IN THE PAST 30 YEARS IS ONE OF THE PRIMARY REASONS FOR SUCH SEEMING IMPOSSIBILITIES AS JET PASSENGER PLANES. HE OBSERVES THAT THIS MATERIALS TECHNOLOGY DEVELOPMENT IS CONTINUING AND CHALLENGES EDUCATORS TO LOOK CAREFULLY AT PROCESSES NOW SHAPING OUR WORLD AND THOSE EXPECTED IN THE NEAR FUTURE; NOT JUST TO KEEP ABREAST OF TECHNOLOGY BUT TO TEACH IT TO THOSE WHO MUST FOLLOW. (MF)

ACCESSION NUMBER: ED133831

CLEARINGHOUSE ACCESSION NUMBER: EA009074

PUBLICATION DATE: APR 74

TITLE: ENERGY CONSERVATION: GUIDELINES FOR ACTION. SUGGESTED GUIDELINES FOR LOCAL SCHOOL DISTRICT DEVELOPMENT OF ENERGY CONSERVATION PROGRAMS.

INSTITUTION CODE: BBB11631

SPONSORING AGENCY CODE: BBB140781; BBB140791; MVK21675

DESCRIPTOR: *CURRICULUM DEVELOPMENT; *CURRICULUM GUIDES; DEPLETED RESOURCES; *EDUCATIONAL OBJECTIVES; ELEMENTARY SECONDARY EDUCATION; *ENERGY CONSERVATION; INTERDISCIPLINARY APPROACH; LIFE STYLE; PERFORMANCE BASED EDUCATION; PERFORMANCE SPECIFICATIONS; RESOURCE GUIDES; SOLAR RADIATION; UTILITIES; *MICHIGAN

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$3.50 PLUS POSTAGE.

DESCRIPTIVE NOTE: 58P.

ISSUE: RIEJUN77

ABSTRACT: CURRICULUM GUIDELINES FOR THE LOCAL DEVELOPMENT OF ENERGY CONSERVATION PROGRAMS IN PUBLIC SCHOOLS REFLECT AN INTERDISCIPLINARY EDUCATIONAL APPROACH--THE RESULT OF A COORDINATED EFFORT BY INDUSTRY, COMMERCE, EDUCATION, AND GOVERNMENT AGENCIES CONCERNED WITH THE ENERGY CRISIS. THE SCOPE AND NATURE OF THE PROBLEM, WITH ITS IMPLICATIONS FOR EDUCATION AND LIFESTYLE, ARE CONTAINED IN THE OPENING PERSPECTIVE. GUIDELINES ARE SUGGESTED FOR THE STUDY OF ENERGY CONSERVATION, WITH THE GOALS--BROAD OVERARCHING PRINCIPLES--FOLLOWED BY THE OBJECTIVES--SPECIFIC TYPES OF PERFORMANCES NECESSARY TO REALIZE THE GOALS. BRIEF DESCRIPTIONS OF REPRESENTATIVE ACTIVITIES EXEMPLIFY DISTRICTWIDE, LOCAL SCHOOL, AND NATIONALLY DEVELOPED APPROACHES TO ENERGY CONSERVATION. A LIST AND DESCRIPTION OF FREE OR INEXPENSIVE INSTRUCTION MATERIALS INCLUDES ORDERING INFORMATION. GUIDING PRINCIPLES FOR ESTABLISHING ENERGY CONSERVATION PROGRAMS TOGETHER WITH SUGGESTED CURRICULUM DEVELOPMENT PROCEDURES AT THE DISTRICT, LOCAL SCHOOL, AND CLASSROOM LEVELS ARE PROVIDED. THE APPENDIX CONTAINS A SUMMARY OF THE PRESENT AVAILABILITY AND FUTURE PROSPECTS OF DIFFERENT ENERGY SOURCES. (MLF)

AVAILABILITY: MICHIGAN ASSOCIATION OF SCHOOL ADMINISTRATORS, 421 WEST KALAMAZOO, LANSING, MICHIGAN 48933 ($0.75, QUANTITY DISCOUNTS)

INSTITUTION NAME: MICHIGAN ASSOCIATION OF SCHOOL ADMINISTRATORS, EAST LANSING.

SPONSORING AGENCY NAME: CONSUMERS POWER CO., JACKSON, MICH.; DETROIT EDISON CO., MICH.; DETROIT PUBLIC SCHOOLS, MICH.

ACCESSION NUMBER: ED133873

CLEARINGHOUSE ACCESSION NUMBER: EA009132

PUBLICATION DATE: 77

TITLE: NATIONAL SURVEY OF PUBLIC SCHOOL DISTRICT ENERGY COSTS. SUMMARY REPORT.

INSTITUTION CODE: BBB12650

DESCRIPTOR: ELEMENTARY SECONDARY EDUCATION; *ENERGY; ENERGY CONSERVATION; *FUEL CONSUMPTION; *NATIONAL SURVEYS; PUBLIC SCHOOL SYSTEMS; *SCHOOL DISTRICT SPENDING; *SCHOOL STATISTICS; TABLES (DATA)

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$1.67 PLUS POSTAGE.

DESCRIPTIVE NOTE: 8P.

ISSUE: RIEJUN77

ABSTRACT: THIS SUMMARY REPORT COVERS THE FINDINGS OF A SURVEY OF ENERGY COSTS, TYPES OF FUEL, AND FUEL CONSUMPTION SENT TO 10,000 SCHOOL DISTRICT SUPERINTENDENTS REPRESENTING 90.5 PERCENT OF THE STUDENTS IN THE PUBLIC SCHOOL SYSTEM. RESPONSES WERE RECEIVED FROM ALMOST 3,000 DISTRICTS. IN ADDITION TO COST AND CONSUMPTION FIGURES BASED ON NUMBERS OF PUPILS, THE STUDY RECEIVED AND COMPUTED INFORMATION ON SQUARE-FOOT COSTS AND CONSUMPTION AND ON COSTS AND CONSUMPTION BASED ON DEGREE DAYS. FUEL COSTS AS A PERCENTAGE OF THE TOTAL CURRENT BUDGET WERE ALSO COMPUTED. FOUR PRELIMINARY TABLES ARE INCLUDED. THE STUDY REPRESENTS THE FIRST MAJOR NATIONAL EFFORT TO LEARN WHAT THE IMPACT OF RISING FUEL COSTS HAS BEEN ON EDUCATION. (AUTHOR/MLF)

INSTITUTION NAME: FEDERAL ENERGY ADMINISTRATION, WASHINGTON, D.C.

ACCESSION NUMBER: ED133899

CLEARINGHOUSE ACCESSION NUMBER: EA009161

PUBLICATION DATE: FEB 77

TITLE: A MODEL FOR EDUCATION: ENERGY-WATER CONSUMPTION DECISION MAKING.

PERSONAL AUTHOR: BONTRAGER, RALPH L.; HUBBARD, CHARLES W.

DESCRIPTOR: BIBLIOGRAPHIES; *BOARD OF EDUCATION POLICY; CHECK LISTS; CONSERVATION EDUCATION; ELEMENTARY SECONDARY EDUCATION; *ENERGY CONSERVATION; EXPENDITURE PER STUDENT; FEDERAL LEGISLATION; FUEL CONSUMPTION; *POLICY FORMATION; SCHOOL IMPROVEMENT; *SCHOOL PLANNING; *WATER RESOURCES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$2.06 PLUS POSTAGE.

DESCRIPTIVE NOTE: 33P.

ISSUE: RIEJUN77

ABSTRACT: PUBLIC SCHOOLS ARE IN A POSITION TO CONVINCE SOCIETY-AT-LARGE OF THE NATIONAL ENERGY PROBLEM. THERE IS A DIRECT RELATIONSHIP BETWEEN ENERGY COSTS TO THE SCHOOLS AND THE TYPE OF EDUCATIONAL PROGRAMS THEY CAN PROVIDE. WHILE WAITING FOR A NATIONAL ENERGY POLICY WITH A SECTION DEVOTED TO SCHOOLS, DISTRICTS CAN CALCULATE THE AMOUNT AND COST OF ENERGY PER PUPIL BY UTILIZING UTILITIES' RECORDS, ENROLLMENT AND ATTENDANCE FIGURES, AND BUILDING MEASUREMENTS. A NUMBER OF ENERGY-SAVING TECHNIQUES ARE OUTLINED. A MODEL OF A DISTRICTWIDE ENERGY CONSERVATION PLAN IS PRESENTED. APPENDIXES CONTAIN A BIBLIOGRAPHY AND EXAMPLES OF PROCEDURES FOLLOWED IN THE PLAN. (AUTHOR/MLF)

ACCESSION NUMBER: ED133907

CLEARINGHOUSE ACCESSION NUMBER: EA009172

PUBLICATION DATE: JAN 77

TITLE: SCHOOLHOUSE. A NEWSLETTER FROM EDUCATIONAL FACILITIES LABORATORIES, NO. 2F.

INSTITUTION CODE: UPX23700

DESCRIPTOR: AIR CONDITIONING; ELEMENTARY SECONDARY EDUCATION; ENERGY CONSERVATION; *FACILITY REQUIREMENTS; *FUEL CONSUMPTION; HEATING; HEAT RECOVERY; LIFE CYCLE COSTING; *SCHOOL DESIGN; SCHOOL DISTRICT SPENDING; *SCHOOL IMPROVEMENT; *SOLAR RADIATION

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 13P.

ISSUE: RIEJUN77

ABSTRACT: THIS ISSUE ADDRESSES THE QUESTION FREQUENTLY ASKED BY ADMINISTRATORS, "IS SOLAR ENERGY SUITABLE FOR NEW OR EXISTING SCHOOLS?" VARIOUS APPLICATIONS OF SOLAR ENERGY THAT SCHOOLS HAVE INSTALLED OR ARE ABOUT TO INSTALL ARE DESCRIBED. THESE EXAMPLES INCLUDE A NEW SCHOOL DESIGNED FOR SOLAR ENERGY, AN EXISTING SCHOOL WITH SOLAR ENERGY ADDED, A SIMPLE SYSTEM OF DIRECTLY HEATING THROUGH GLASS ROOFLIGHTS, AND A SYSTEM FOR HEATING HOT WATER FOR WASHROOMS AND A CAFETERIA. THE BASIC TECHNIQUES FOR HARNESSING THE SUN'S ENERGY ARE ALSO DESCRIBED. (AUTHOR/MLF)

AVAILABILITY: EDUCATIONAL FACILITIES LABORATORIES, 850 THIRD AVENUE, NEW YORK, NEW YORK 10022 (FREE)

INSTITUTION NAME: EDUCATIONAL FACILITIES LABS., INC., NEW YORK, N.Y.

ACCESSION NUMBER: ED133909

CLEARINGHOUSE ACCESSION NUMBER: EA009179

PUBLICATION DATE: 77

TITLE: CUTTING COSTS: SUCCESSFUL WAYS TO REDUCE SCHOOL EXPENDITURES. CURRENT TRENDS IN SCHOOL POLICIES & PROGRAMS. EDUCATION U.S.A. SPECIAL REPORT.

PERSONAL AUTHOR: GONDER, PEGGY

INSTITUTION CODE: BBB07209

DESCRIPTOR: BUILDING OPERATION; DECLINING ENROLLMENT; EDUCATIONAL FACILITIES; *EDUCATIONAL PLANNING; ELEMENTARY SECONDARY EDUCATION; ENERGY CONSERVATION; *EXPENDITURES; FOOD SERVICE; *OPERATING EXPENSES; PURCHASING; *SCHOOL DISTRICT SPENDING; SCHOOL MAINTENANCE; SCHOOL ORGANIZATION; STAFF UTILIZATION; STUDENT TRANSPORTATION; SURVEYS; VANDALISM

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 65P.

ISSUE: RIEJUN77

ABSTRACT: HOW TO DECREASE SCHOOL OPERATING COSTS WITHOUT HURTING THE QUALITY OF EDUCATION IS THE SUBJECT OF THIS REPORT, WHICH CONTAINS SUGGESTIONS GLEANED FROM SCHOOL DISTRICTS ALL OVER THE COUNTRY IN A SURVEY CONDUCTED BY THE NATIONAL SCHOOL PUBLIC RELATIONS ASSOCIATION. THE MOST IMPORTANT ATTITUDE THAT ALL MEMBERS OF THE SCHOOL COMMUNITY CAN HOLD IS AN ATTITUDE SUPPORTING CONSERVATION IN ALL AREAS, INCLUDING, OF COURSE, CONSERVATION OF ENERGY. CHAPTERS OF THIS REPORT COVER, IN ADDITION TO ENERGY CONSERVATION, STAFF UTILIZATION, FACILITIES USE, BUILDING MAINTENANCE, SCHOOL ORGANIZATION, COOPERATIVE PURCHASING, STUDENT TRANSPORTATION, FOOD SERVICE, AND VANDALISM. THE OPPORTUNITIES FOR CONSERVATION OF SCHOOL RESOURCES ARE PRESENT IN THESE DAYS OF DECLINING ENROLLMENT, BUT SCHOOLS MUST PLAN CAREFULLY TO REALIZE SAVINGS. (AUTHOR/DS)

AVAILABILITY: NATIONAL SCHOOL PUBLIC RELATIONS ASSOCIATION, 1801 NORTH MOORE STREET, ARLINGTON, VIRGINIA 22209 (STOCK NO. 411-13331; $6.75, ALL ORDERS UNDER $8.00 ON AN AUTHORIZED PURCHASE ORDER FROM A SCHOOL DISTRICT, ORGANIZATION OR INSTITUTION)

INSTITUTION NAME: NATIONAL SCHOOL PUBLIC RELATIONS ASSOCIATION, ARLINGTON, VA.

ACCESSION NUMBER: ED133918

CLEARINGHOUSE ACCESSION NUMBER: EA009197

PUBLICATION DATE: MAR 76

TITLE: THE CONSERVATION OF ENERGY IN SCHOOLS—A FEASIBILITY REPORT.

PERSONAL AUTHOR: WHITWORTH, FRED E.

INSTITUTION CODE: BBB14173

DESCRIPTOR: BUILDING SYSTEMS; COST EFFECTIVENESS; ELEMENTARY SECONDARY EDUCATION; *ENERGY CONSERVATION; *FACILITY GUIDELINES; *FACILITY REQUIREMENTS; FLEXIBLE FACILITIES; HEAT RECOVERY; INSTRUCTIONAL MATERIALS CENTERS; PERFORMANCE SPECIFICATIONS; PREFABRICATION; SCHOOL CONSTRUCTION; SCHOOL IMPROVEMENT; SCHOOL MAINTENANCE; *SCHOOL PLANNING; SOLAR RADIATION; *CANADA; WINDMILLS

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$3.50 PLUS POSTAGE.

DESCRIPTIVE NOTE: 51P.

ISSUE: RIEJUN77

ABSTRACT: THIS REPORT IS CONCERNED WITH SUGGESTIONS FOR TRANSLATING CHANGING EDUCATIONAL REQUIREMENTS AND COMMUNITY NEEDS INTO APPROPRIATE SCHOOL FACILITIES THAT ARE DESIGNED, OR CHANGED, TO BE COST BENEFICIAL AND TO CONSERVE ENERGY. PLANNING GUIDES ARE OFFERED FOR THE CONSTRUCTION AND THE IMPROVEMENT OF ELEMENTARY AND SECONDARY SCHOOLS. SOME PREVENTATIVE MAINTENANCE PROCEDURES AND HEAT RECOVERY METHODS ARE NOTED. THE REPORT ALSO LOOKS AT ALTERNATIVE WAYS OF HEATING AND COOLING BUT PARTICULARLY AT SOLAR HEATING AND HEAT PUMPS. SOME FIGURES FROM LIMITED STUDIES GIVEN TO INDICATE ENERGY SAVINGS THAT VARIOUS MODIFICATIONS COULD BE REASONABLY EXPECTED TO OFFER. THE USES OF BUILDING SYSTEMS AND WINDMILLS ARE ALSO EXAMINED. (AUTHOR/MLF)

INSTITUTION NAME: CANADIAN SCHOOL TRUSTEES ASSOCIATION, OTTAWA (ONTARIO).

ACCESSION NUMBER: ED134233

CLEARINGHOUSE ACCESSION NUMBER: IR004461

PUBLICATION DATE: JUL 75

TITLE: NEW RURAL SOCIETY CONCEPT AND PROGRAM PLAN.

INSTITUTION CODE: BBB00306

SPONSORING AGENCY CODE: BBB06621

DESCRIPTOR: ADULT EDUCATION; COMMUNICATION SATELLITES; EMPLOYMENT SERVICES; ENERGY CONSERVATION; HEALTH SERVICES; HUMAN SERVICES; *RURAL DEVELOPMENT; RURAL EDUCATION; *URBAN TO RURAL MIGRATION; NEW RURAL SOCIETY

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$3.50 PLUS POSTAGE.

DESCRIPTIVE NOTE: 69P.; PAPER PRESENTED AT THE CONFERENCE ON EDUCATIONAL APPLICATIONS OF SATELLITES (ARLINGTON, VIRGINIA, FEBRUARY 2-3, 1977). FOR RELATED DOCUMENTS, SEE IR 004 458-468 ; TABLES WILL REPRODUCE POORLY DUE TO SMALL TYPE

ISSUE: RIEJUN77

ABSTRACT: TO HELP ACHIEVE A MORE DISPERSED POPULATION DISTRIBUTION, IT IS THE STRATEGY OF THE NEW RURAL SOCIETY (NRS) PROJECT TO ADDRESS THE INTERDEPENDENT RURAL, URBAN, AND ENERGY PROBLEMS BY SOLVING THE RURAL DEVELOPMENT PROBLEM ISSUE FIRST. PEOPLE LIVE IN LARGE URBAN AREAS CHIEFLY BECAUSE THE JOBS AND ESSENTIAL SERVICES ARE THERE. ADVANCES IN COMMUNICATIONS TECHNOLOGY COULD MAKE IT POSSIBLE TO DECENTRALIZE BUSINESS AND GOVERNMENT EMPLOYMENT TO RURAL AREAS AND STILL MAINTAIN DIRECT TIES WITH THE URBAN MARKETPLACE VIA SOPHISTICATED, RELATIVELY LOW-COST COMMUNICATIONS LINKS. THIS DOCUMENT IS DIVIDED INTO SIX SECTIONS: THE FIRST PRESENTS THE BASIC PHENOMENA THAT GAVE RISE TO THE NRS CONCEPT. THE SECOND SECTION DISCUSSES THESE PHENOMENA IN GREATER DETAIL. THE THIRD DESCRIBES THE NRS CONCEPT AND ITS APPROACH TO RURAL DEVELOPMENT. THE FOURTH PART DEALS WITH THE POTENTIAL IMPACT OF POPULATION DECENTRALIZATION ON DOMESTIC ENERGY PRODUCTION AND CONSUMPTION. THE FIFTH PRESENTS THE OVERALL NRS OBJECTIVES AND THE SIXTH OUTLINES THE PROGRAM THAT NRS PROPOSES TO UNDERTAKE IN THE NEXT FEW YEARS. (AUTHOR/WBC)

CONTRACT NUMBER: HUD-H-2104R

INSTITUTION NAME: FAIRFIELD UNIV., CONN.

SPONSORING AGENCY NAME: NATIONAL INST. OF EDUCATION (DHEW), WASHINGTON, D.C.

ACCESSION NUMBER: ED134412

CLEARINGHOUSE ACCESSION NUMBER: SE021421

PUBLICATION DATE: MAY 76

TITLE: AN ENERGY EDUCATION/CONSERVATION PLAN FOR TENNESSEE.

PERSONAL AUTHOR: GIBBONS, JOHN H.; AND OTHERS

INSTITUTION CODE: BBB13392

SPONSORING AGENCY CODE: XIE86197

DESCRIPTOR: COMMUNITY ACTION; *CONSERVATION EDUCATION; *ENERGY; *NATURAL RESOURCES; *PROGRAM DESCRIPTIONS; PROGRAM PLANNING; *STATE PROGRAMS; *STATEWIDE PLANNING; UNIVERSITIES; *TENNESSEE

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$8.69 PLUS POSTAGE.

DESCRIPTIVE NOTE: 154P.

ISSUE: RIEJUN77

ABSTRACT: PRESENTED IS AN ENERGY/EDUCATION CONSERVATION PLAN FOR TENNESSEE. THE FIRST SECTION IS CONCERNED WITH PROGRAM JUSTIFICATION. DISCUSSED ARE THE ENERGY SITUATION IN TENNESSEE, NEED FOR A PROGRAM, AND SOURCES OF INFORMATION. THE SECOND SECTION PRESENTS A BRIEF SUMMARY OF THE PROGRAM PLANNING PROCESS. SECTION THREE PRESENTS A COMPREHENSIVE PLAN. THIS SECTION INCLUDES PROGRAM PARAMETERS, GROUPS AND AGENCIES TO BE INVOLVED, AND PROGRAMS RECOMMENDED FOR FUNDING CONSIDERATION IN 1976. THE APPENDICES INCLUDE A NUMBER OF ITEMS: (1) MATERIALS RELATED TO THE FIRST TASK FORCE MEETING; (2) MATERIALS RELATED TO THE SECOND TASK FORCE MEETING; (3) PROCESS INSTRUMENT USED FOR COLLECTING DATA; (4) ANALYSIS OF THE PROCESS INSTRUMENT; AND (5) WORKSHOP EVALUATION DATA. (RH)

INSTITUTION NAME: TENNESSEE UNIV., KNOXVILLE. ENVIRONMENT CENTER.

SPONSORING AGENCY NAME: TENNESSEE UNIV., KNOXVILLE. STATE AGENCY FOR TITLE I.

ACCESSION NUMBER: ED134416

CLEARINGHOUSE ACCESSION NUMBER: SE021487

PUBLICATION DATE: 76

TITLE: ENERGY PROBLEMS: PUBLIC BELIEFS, ATTITUDES AND BEHAVIORS.

PERSONAL AUTHOR: THOMPSON, PHYLLIS T.; MALTAVISH, JOHN

INSTITUTION CODE: BBB14145

DESCRIPTOR: *ATTITUDES; *COMMUNITY ATTITUDES; CONSERVATION (CONCEPT); *ENERGY; ENVIRONMENT; *NATURAL RESOURCES; RESEARCH; *SURVEYS; *MICHIGAN

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 67P.; NOT AVAILABLE IN HARD COPY DUE TO MARGINAL LEGIBILITY OF ORIGINAL DOCUMENT

ISSUE: RIEJUN77

ABSTRACT: THIS SURVEY REPORTED ONE PHASE OF A LARGER PROJECT. THE GOALS OF THE PROJECT ARE TO PLAN AND CONDUCT A PUBLIC EDUCATION PROGRAM ON ENERGY-RELATED CONCERNS THAT WILL PRODUCE AN INFORMED PUBLIC WILLING TO SUPPORT AND COOPERATE WITH THE STRATEGIES NECESSARY FOR THE LONG-TERM RESOLUTION OF OUR ENERGY PROBLEMS. REPORTED IN THIS DOCUMENT ARE THE RESULTS OF A SURVEY CONDUCTED IN METROPOLITAN GRAND RAPIDS, MICHIGAN IN FEBRUARY, 1976. SIX HUNDRED ADDRESSES WERE SELECTED BEGINNING WITH A RANDOM START. PERSONAL INTERVIEWS WERE CONDUCTED AND A RESPONSE RATE OF ABOUT 86% WAS OBTAINED. THE SURVEY INCLUDED SIX LOGIC AREAS: (1) ENERGY PROBLEMS; (2) ENERGY SUPPLIES; (3) ENERGY SHORTAGES; (4) EXPECTATIONS OF PRICE INCREASES; (5) ADAPTATIONS TO PERCEIVED ENERGY SHORTAGES AND ENERGY COST INCREASES; AND (6) CREDIBILITY OF INFORMATION SOURCES. RESULTS FOR INDIVIDUAL ITEMS ARE REPORTED AS WELL AS GENERAL CONCLUSIONS. (RH)

AVAILABILITY: GRAND VALLEY STATE COLLEGES, URBAN AND ENVIRONMENTAL STUDIES INST., 312 E. FULTON ST., GRAND RAPIDS, MICHIGAN 49503 ($3.00)

INSTITUTION NAME: GRAND VALLEY STATE COLLEGES, ALLENDALE, MICH. URBAN AND ENVIRONMENTAL STUDIES INST.

ACCESSION NUMBER: ED134417

CLEARINGHOUSE ACCESSION NUMBER: SE021489

PUBLICATION DATE: 76

TITLE: ENERGY TRAILS: A GUIDEBOOK DESCRIBING ENERGY SITES, POWER PLANTS, SCIENCE MUSEUMS, AND OTHER INTERESTING PLACES. NORTHEASTERN STATES. VOLUME 1.

PERSONAL AUTHOR: ANGELO, JOSEPH A., JR.

INSTITUTION CODE: BB813553

DESCRIPTOR: ELECTRICITY; *ENERGY; *FACILITIES; *FIELD TRIPS; *GUIDES; INDUSTRY; LABORATORIES; MUSEUMS; *NATURAL RESOURCES; TECHNOLOGY; *POWER PLANTS

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$11.37 PLUS POSTAGE.

DESCRIPTIVE NOTE: 206P.; PHOTOGRAPHS MAY NOT REPRODUCE WELL

ISSUE: RIEJUN77

ABSTRACT: THIS IS THE FIRST OF A SET OF BOOKLETS THAT HAVE BEEN PREPARED AS CONVENIENT GUIDEBOOKS TO THOSE MAJOR PLACES OF INTEREST THROUGHOUT THE UNITED STATES THAT ARE RELATED TO ITS ENERGY TECHNOLOGY ACHIEVEMENTS. THESE INCLUDE HISTORICAL SITES, POWER PRODUCTION PLANTS, RESEARCH FACILITIES, AND MUSEUMS. MAPS, ILLUSTRATIONS, AND COMMENTARY PROVIDE A NATIONWIDE ENERGY TOUR. IN THIS WAY THE TRAVELER MAY VIEW THE PAST AND ALSO BE EXPOSED TO PRESENT ENERGY TECHNOLOGY AND THE ENERGY RESOURCE DEVELOPMENT CONCEPTS OF THE FUTURE. THIS BOOKLET INCLUDES SITES FROM VERMONT, MASSACHUSETTS, NEW YORK, NEW JERSEY, PENNSYLVANIA, MARYLAND AND THE DISTRICT OF COLUMBIA. A MAP KEY SHOWS THE 23 SITES DESCRIBED. FOR EACH SITE, THERE IS A LOCAL MAP, SITE DESCRIPTION, AND ADDRESS OF WHOM TO CONTACT FOR ADDITIONAL INFORMATION. (RH)

REPORT NUMBER: ERDA-1012(6-76)

INSTITUTION NAME: ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION, WASHINGTON, D.C.

ACCESSION NUMBER: ED134422

CLEARINGHOUSE ACCESSION NUMBER: SE021559

PUBLICATION DATE: 76

TITLE: HEAT, ENERGY, AND ORDER, PART TWO OF AN INTEGRATED SCIENCE SEQUENCE, TEACHER'S GUIDE, 1970 EDITION.

INSTITUTION CODE: BB806337

SPONSORING AGENCY CODE: FGK57295

DESCRIPTOR: *ENERGY; *INTEGRATED CURRICULUM; PHYSICAL SCIENCES; *SCIENCE ACTIVITIES; SCIENCE COURSE IMPROVEMENT PROJECT; SCIENCE EDUCATION; SCIENCE UNITS; SECONDARY EDUCATION; *SECONDARY SCHOOL SCIENCE; *UNIFIED STUDIES PROGRAMS; UNITS OF STUDY (SUBJECT FIELDS); *PORTLAND PROJECT

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 173P.; FOR STUDENT GUIDE, SEE ED 064 094; FOR RELATED TEACHER'S GUIDES, SEE SE 021 558->563; NOT AVAILABLE IN HARD COPY DUE TO MARGINAL LEGIBILITY OF ORIGINAL DOCUMENT

ISSUE: RIEJUN77

ABSTRACT: THIS TEACHER'S GUIDE CONTAINS PART TWO OF THE FOUR-PART FIRST YEAR PORTLAND PROJECT, A THREE-YEAR SECONDARY INTEGRATED SCIENCE CURRICULUM SEQUENCE. THIS PART INVOLVES THE STUDENT WITH UNIFYING PRINCIPLES ESSENTIAL FOR DEEPER UNDERSTANDING OF THE CONCEPT OF ENERGY. CONFIDENCE IN THE ATOMIC NATURE OF MATTER IS BUILT BY RELATING HEAT IN TERMS OF RANDOM MOLECULAR MOTION VIA THE COLORIMETRY EXPERIMENT. THE ENERGY CONCEPT IS THEN EXTENDED AND GENERALIZED VIA VARIOUS ENERGY CONVERSIONS; AND FINALLY, LIMITATIONS AND IMPLICATIONS OF ENERGY CONVERSION ARE EXPLORED, ENDING WITH A VIEW OF LIFE AS AN ORGANIZER IN NATURE, POWERED BY ENERGY, BUT ALWAYS AT THE EXPENSE OF INFLUENCING ITS ENVIRONMENT. NOTES TO THE TEACHER, EXAMPLES OF DATA, MATERIALS AND EQUIPMENT NEEDED, AND PROBLEM CALCULATIONS ARE INCLUDED. (SL)

INSTITUTION NAME: PORTLAND PROJECT COMMITTEE, OREG.

SPONSORING AGENCY NAME: NATIONAL SCIENCE FOUNDATION, WASHINGTON, D.C.

ACCESSION NUMBER: ED134424

CLEARINGHOUSE ACCESSION NUMBER: SE021561

PUBLICATION DATE: 73

TITLE: MOTION AND ENERGY CHEMICAL REACTIONS, PARTS ONE AND TWO OF AN INTEGRATED SCIENCE SEQUENCE, TEACHER'S GUIDE, 1973 EDITION.

INSTITUTION CODE: BB806337

SPONSORING AGENCY CODE: FGK57295

DESCRIPTOR: ENERGY; *INTEGRATED CURRICULUM; KINETIC MOLECULAR THEORY; MOTION; PHYSICAL SCIENCES; *SCIENCE ACTIVITIES; SCIENCE COURSE IMPROVEMENT PROJECT; SCIENCE EDUCATION; SCIENCE UNITS; SECONDARY EDUCATION; SECONDARY SCHOOL SCIENCE; *UNIFIED STUDIES PROGRAMS; UNITS OF STUDY (SUBJECT FIELDS); *PORTLAND PROJECT

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$11.37 PLUS POSTAGE.

DESCRIPTIVE NOTE: 220P.; FOR 1971 EDITION STUDENT GUIDE, SEE ED 064 095; FOR RELATED TEACHER'S GUIDES, SEE SE 021 558-563

ISSUE: RIEJUN77

ABSTRACT: THIS TEACHER'S GUIDE IS FOR THE SECOND YEAR OF THE PORTLAND PROJECT, A THREE-YEAR INTEGRATED SECONDARY SCIENCE CURRICULUM SEQUENCE. THE FIRST OF TWO PARTS IN THIS VOLUME, "MOTION AND ENERGY," BEGINS WITH THE STUDY OF MOTION, GOING FROM THE QUANTITATIVE DESCRIPTION TO A CONSIDERATION OF WHAT CAUSES MOTION AND A DISCUSSION OF NEWTON'S LAWS. THERE FOLLOWS THE DEVELOPMENT OF THE LAWS OF CONSERVATION OF MOMENTUM AND ENERGY, INCLUDING A DISCUSSION OF ENERGY IN BIOLOGICAL SYSTEMS, AND CULMINATING WITH A DISCUSSION OF THE KINETIC MOLECULAR THEORY. PART TWO, "CHEMICAL REACTIONS," BUILDS BASIC CHEMICAL CONCEPTS NECESSARY FOR THE ANALYTICAL APPROACH IN THE THIRD YEAR COURSE. TOPICS CONSIDERED IN THIS PART INCLUDE THE MOLE CONCEPT, EQUATION WRITING, ENERGETICS ASSOCIATED WITH CHEMICAL REACTIONS, THE DYNAMIC NATURE OF PARTICLES AND THEIR INTERACTIONS, AND THE APPLICATION OF ENERGY AND EQUILIBRIUM TO CHEMICAL SYSTEMS. THE HARVARD PHYSICS PROJECT TEXTBOOK AND THE CHEMICAL EDUCATIONAL MATERIALS STUDY (CHEMS) TEXTBOOK ARE USED FOR MOST OF THE READING ASSIGNMENTS IN THE SECOND YEAR COURSE. A REVIEW OF THE DEVELOPMENT OF THE THREE-YEAR PROGRAM, ITS RATIONALE AND CONTENT, AND A THREE-YEAR COURSE SUBJECT OUTLINE ARE INCLUDED IN THIS VOLUME. NOTES TO THE TEACHER, EXAMPLES OF DATA, AND PROBLEM CALCULATIONS ARE INCLUDED. (AUTHOR/SL)

INSTITUTION NAME: PORTLAND PROJECT COMMITTEE, OREG.

SPONSORING AGENCY NAME: NATIONAL SCIENCE FOUNDATION, WASHINGTON, D.C.

ACCESSION NUMBER: ED134426

CLEARINGHOUSE ACCESSION NUMBER: SE021563

PUBLICATION DATE: 73

TITLE: CHEMISTRY OF LIVING MATTER, ENERGY CAPTURE & GROWTH, PARTS THREE & FOUR OF AN INTEGRATED SCIENCE SEQUENCE, TEACHER'S GUIDE, 1973 EDITION.

INSTITUTION CODE: BB806337

SPONSORING AGENCY CODE: FGK57295

DESCRIPTOR: *ENERGY; *INTEGRATED CURRICULUM; PHYSICAL SCIENCES; *SCIENCE ACTIVITIES; SCIENCE COURSE IMPROVEMENT PROJECT; SCIENCE EDUCATION; SCIENCE UNITS; SECONDARY EDUCATION; *SECONDARY SCHOOL SCIENCE; *UNIFIED STUDIES PROGRAMS; UNITS OF STUDY (SUBJECT FIELDS); *PORTLAND PROJECT

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$12.71 PLUS POSTAGE.

DESCRIPTIVE NOTE: 235P.; FOR 1971 EDITION STUDENT GUIDE, SEE ED 064 097; FOR RELATED TEACHER'S GUIDES, SEE SE 021 558-562

ISSUE: RIEJUN77

ABSTRACT: THIS TEACHER'S GUIDE INCLUDES PARTS THREE AND FOUR OF THE FOUR-PART THIRD YEAR PORTLAND PROJECT, A THREE-YEAR INTEGRATED SECONDARY SCIENCE CURRICULUM SEQUENCE. THE UNDERLYING INTENTION OF THE THIRD YEAR IS TO STUDY ENERGY AND ITS IMPORTANCE TO LIFE. ENERGY-RELATED CONCEPTS CONSIDERED IN YEAR ONE AND TWO, AND THE CONCEPTS RELATED TO ATOMIC STRUCTURE AND PARTICLE PHENOMENA CONSIDERED EARLIER IN THE THIRD YEAR ARE FURTHER BUILT UPON IN THIS VOLUME. CHAPTERS INCLUDE: MONOMERS AND HOW THEY ARE BUILT; CHEMISTRY OF SIMPLE CARBON COMPOUNDS; POLYMERS OR STRINGING MONOMERS TOGETHER; POLYMERS IN 3D OR THE SHAPE OF THINGS TO COME; WHERE THE ACTION IS - THE ACTIVE SITE; POLYMERS TO POLYMERS; GENES, PROTEINS, AND MUTATIONS; ENERGY CAPTURE; ENERGY CONSUMPTION AND METABOLISM; AND METABOLISM AND GENES. NOTES TO THE TEACHER, EXAMPLES OF DATA, AND PROBLEM CALCULATIONS ARE INCLUDED. (AUTHOR/SL)

INSTITUTION NAME: PORTLAND PROJECT COMMITTEE, OREG.

SPONSORING AGENCY NAME: NATIONAL SCIENCE FOUNDATION, WASHINGTON, D.C.

ACCESSION NUMBER: ED134442

CLEARINGHOUSE ACCESSION NUMBER: SE021781

PUBLICATION DATE: 75

TITLE: ERNIE ERG'S SECOND PRIMER ON THE ECONOMICS OF THE ENERGY CRISIS.

PERSONAL AUTHOR: NIXON, ILA

INSTITUTION CODE: 88804565; 88811765

SPONSORING AGENCY CODE: 88800077

DESCRIPTORS: CONSERVATION EDUCATION; ECONOMICS; *ELEMENTARY SECONDARY EDUCATION; *ENERGY; *ENVIRONMENTAL EDUCATION; *INSTRUCTIONAL MATERIALS; *NATURAL RESOURCES; *SCIENCE EDUCATION; *UNITS OF STUDY (SUBJECT FIELDS)

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$2.06 PLUS POSTAGE.

DESCRIPTIVE NOTE: 27P.; CONTAINS OCCASIONAL LIGHT AND BROKEN TYPE

ISSUE: RIEJUN77

ABSTRACT: THIS UNIT IS INTENDED TO TEACH ABOUT SCARCE RESOURCES AND TO RELATE THEM TO BASIC ECONOMICS AND ENERGY CONSERVATION. THE CONTENT AND ACTIVITIES OF THE UNIT ARE INTRODUCED THROUGH CONVERSATION AND READINGS FLEXIBLE ENOUGH FOR FREE STUDENT EXPRESSION. THE PURPOSE OF THE STUDY IS TO PROVIDE STUDENTS WITH ENOUGH INFORMATION ABOUT PRESENT AND EMERGING SOURCES OF ENERGY TO ENABLE THEM TO ANALYZE THE PROBLEMS, MAKE SOME DECISIONS AT THEIR OWN DIFFERENT LEVELS OF ABILITY, AND MOTIVATE THEM TO BECOME ENERGY CONSERVATION ACTIVISTS. THE UNIT IS DIVIDED INTO FOUR SESSIONS. BACKGROUND MATERIAL IS PROVIDED FOR EACH SESSION AND ACTIVITIES ARE SUGGESTED. (RH)

INSTITUTION NAME: ARKANSAS STATE COUNCIL ON ECONOMIC EDUCATION, LITTLE ROCK.; ARKANSAS STATE DEPT. OF EDUCATION, LITTLE ROCK. ENVIRONMENTAL EDUCATION OFFICE.

SPONSORING AGENCY NAME: BUREAU OF ELEMENTARY AND SECONDARY EDUCATION (DHEW/OE), WASHINGTON, D.C.

ACCESSION NUMBER: ED134445

CLEARINGHOUSE ACCESSION NUMBER: SE021916

PUBLICATION DATE: 75

TITLE: A COMPOSITE OF ENERGY CURRICULUM GUIDES AND ENRICHMENT MATERIALS.

PERSONAL AUTHOR: MAGNOLI, MICHAEL A.; WERT, JONATHAN M.

INSTITUTION CODE: 88812506

SPONSORING AGENCY CODE: 88800077

DESCRIPTORS: *BIBLIOGRAPHIES; *ELEMENTARY SECONDARY EDUCATION; *ENERGY; *INSTRUCTIONAL MATERIALS; *REFERENCE MATERIALS; *TEACHING GUIDES; ELEMENTARY SECONDARY EDUCATION ACT TITLE III; ESEA TITLE III

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 16P.; NOT AVAILABLE IN HARD COPY DUE TO MARGINAL LEGIBILITY OF ORIGINAL DOCUMENT

ISSUE: RIEJUN77

ABSTRACT: THIS BIBLIOGRAPHY WAS PREPARED TO PROVIDE A LISTING OF A VARIETY OF CURRICULUM MATERIALS, INSTRUCTIONAL MATERIALS, AND REFERENCES RELATED TO ENERGY. EACH ENTRY INCLUDES: (1) SOURCE, (2) TITLE, AND (3) COMMENTS ON GRADE LEVEL AND PRICE WHEN AVAILABLE. MATERIALS ARE PRIMARILY SELECTED FOR RELEVANCE TO GRADES K-12. (RH)

INSTITUTION NAME: MOBILE COUNTY PUBLIC SCHOOLS, ALA.

SPONSORING AGENCY NAME: BUREAU OF ELEMENTARY AND SECONDARY EDUCATION (DHEW/OE), WASHINGTON, D.C.

ACCESSION NUMBER: ED134450

CLEARINGHOUSE ACCESSION NUMBER: SE021922

PUBLICATION DATE: JUN 76

TITLE: CASE STUDIES IN REGIONAL ENERGY PLANNING. PAPERS PRESENTED AT A SYMPOSIUM AT THE ANNUAL MEETING OF THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE (142ND, BOSTON, MASSACHUSETTS, FEBRUARY 18-24, 1976).

PERSONAL AUTHOR: BLANPIED, WILLIAM A., ED.; VERMILYE, GRETCHEN, ED.

INSTITUTION CODE: FGK01540

SPONSORING AGENCY CODE: GPX27000

DESCRIPTORS: *CASE STUDIES; *CONFERENCES; *ENERGY; FEDERAL PROGRAMS; FEDERAL STATE RELATIONSHIP; *POLICY FORMATION; REGIONAL COOPERATION; *REGIONAL PLANNING; WORLD PROBLEMS

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$4.67 PLUS POSTAGE.

DESCRIPTIVE NOTE: 83P.

ISSUE: RIEJUN77

ABSTRACT: THE PAPERS REPRODUCED IN THIS COLLECTION WERE ORIGINALLY PREPARED FOR PRESENTATION AT A FEBRUARY 1976 SYMPOSIUM AT THE ANNUAL MEETING OF THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE. THE SYMPOSIUM SUMMARIZED A SERIES OF THREE REGIONAL SEMINARS ON NATIONAL ENERGY POLICY IN A REGIONAL CONTEXT. THESE SEMINARS WERE HELD IN MINNESOTA, NEW MEXICO, AND CALIFORNIA. FIVE PAPERS ARE INCLUDED IN THIS PUBLICATION. THE FIRST HIGHLIGHTS SOME OF THE MAJOR CONCLUSIONS OF THE FORD FOUNDATION'S ENERGY POLICY PROJECT, PARTICULARLY THOSE WITH IMPLICATIONS FOR PLANNING AT THE SUB-NATIONAL LEVEL. THE NEXT THREE PAPERS PRESENT ENERGY PROBLEMS AS VIEWED FROM MINNESOTA, NEW MEXICO, AND CALIFORNIA. THE LAST PAPER CONSIDERS PROSPECTS FOR INTERREGIONAL COOPERATION IN ENERGY POLICY PLANNING. (RH)

REPORT NUMBER: AAAS-76-R-6

AVAILABILITY: AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE, 1776 MASSACHUSETTS AVENUE, N.W., WASHINGTON, D.C. 20036 (FREE)

INSTITUTION NAME: AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE, WASHINGTON, D.C.

SPONSORING AGENCY NAME: FORD FOUNDATION, NEW YORK, N.Y.

ACCESSION NUMBER: ED134452

CLEARINGHOUSE ACCESSION NUMBER: SE021926

PUBLICATION DATE: 75

TITLE: SCIENCE K-12, CONSERVATION OF ENERGY. UTICA CITY SCHOOL DISTRICT ARTICULATED CURRICULUM: PROJECT SEARCH, 1975.

INSTITUTION CODE: GPX59054

SPONSORING AGENCY CODE: 88800077

DESCRIPTORS: BEHAVIORAL OBJECTIVES; BIOLOGY; CONSERVATION EDUCATION; *CURRICULUM GUIDES; EDUCATIONAL OBJECTIVES; *ELEMENTARY SCHOOL SCIENCE; *ELEMENTARY SECONDARY EDUCATION; ENERGY CONSERVATION; INTEGRATED CURRICULUM; PHYSICAL SCIENCES; *SCIENCE EDUCATION; *SECONDARY SCHOOL SCIENCE; ELEMENTARY SECONDARY EDUCATION ACT TITLE III; ESEA TITLE III

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 89P.; FOR RELATED DOCUMENTS, SEE SE 021 927-931; NOT AVAILABLE IN HARD COPY DUE TO MARGINAL LEGIBILITY OF ORIGINAL DOCUMENT

ISSUE: RIEJUN77

ABSTRACT: TWO-COLUMN OBJECTIVES ARE LISTED FOR AN INTEGRATED SCIENCE CURRICULUM (GRADES K-12), OFTEN SUBHEADED ACCORDING TO SCIENCE AREA (PHYSICAL SCIENCES, PHYSICS, BIOLOGY, CHEMISTRY, GENERAL SCIENCE) AND GRADE LEVEL. OBJECTIVES THAT RELATE CHARACTERISTICS AND FORMS OF ENERGY TO ENERGY CONSERVATION ARE STRESSED IN THE PRIMARY GRADES (K-6). IN GRADE 7, THE OBJECTIVES ARE GROUPED FOR THE STUDY OF ENERGY, PHOTOSYNTHESIS AND THE NERVOUS SYSTEM; OTHER NON-INTEGRATED TOPICS INCLUDE NEWTON'S LAWS OF MOTION, ELECTRICAL CIRCUITRY, HEAT ENERGY, MECHANICAL ENERGY, SOUND, WEATHERING AND EROSION. OBJECTIVES CONCERNING THE STUDY OF RADIANT ENERGY, NUCLEAR ENERGY, ELECTRIC ENERGY, AND MOLECULAR THEORY ARE INCLUDED FOR GRADE 9. AN ATTEMPT IS MADE IN GRADES 10-11 TO RELATE CHEMISTRY AND PHYSICS TO THE STUDY OF LIVING THINGS. NON-INTEGRATED OBJECTIVES ARE WRITTEN FOR GRADE 11 IN EARTH SCIENCE AND FOR GRADE 12 IN PHYSICS. (CS)

INSTITUTION NAME: UTICA CITY SCHOOL DISTRICT, N.Y.

SPONSORING AGENCY NAME: BUREAU OF ELEMENTARY AND SECONDARY EDUCATION (DHEW/OE), WASHINGTON, D.C.

ACCESSION NUMBER: ED134472

CLEARINGHOUSE ACCESSION NUMBER: SE022011

PUBLICATION DATE: FEB 76

TITLE: COMMUNITY INVOLVEMENT IN PROBLEMS OF ENERGY AND GROWTH IN SAN DIEGO.

PERSONAL AUTHOR: KIRSCH, JEFFREY W.

DESCRIPTORS: *CITIZEN PARTICIPATION; *CONFERENCES; CONSERVATION EDUCATION; *ENERGY; *NATURAL RESOURCES; *URBAN AREAS; *CALIFORNIA (SAN DIEGO)

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$1.67 PLUS POSTAGE.

DESCRIPTIVE NOTE: 18P.; PAPER PRESENTED AT THE ANNUAL MEETING OF THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE (BOSTON, MASSACHUSETTS, FEBRUARY 22-23, 1976); CONTAINS OCCASIONAL LIGHT AND BROKEN TYPE

ISSUE: RIEJUN77

ABSTRACT: DESCRIBED IS THE DEVELOPMENT AND SOME OF THE OPERATIONS OF THE SAN DIEGO ENERGY POLICY PLANNING FORUM. THE BASIC INTENT OF THE FORUM WAS TO PROVIDE A MEANS TO PRESENT BACKGROUND INFORMATION AND VARIOUS VIEWPOINTS OF OUR ENERGY PAST, PRESENT, AND FUTURE. EXAMPLES OF ACTIVITIES THAT WERE INITIATED AS A CONSEQUENCE OF THE FORUM ARE LISTED. (RH)

ACCESSION NUMBER: ED135637

CLEARINGHOUSE ACCESSION NUMBER: SE022020

PUBLICATION DATE: AUG 76

TITLE: STAFF HANDBOOK ON NATURAL GAS.

PERSONAL AUTHOR: GORGES, M. A., ED.; RAINE, L. P., ED.

INSTITUTION CODE: 88814193

DESCRIPTORS: *CONSERVATION (ENVIRONMENT); ECONOMICS; *ENERGY; *GOVERNMENT ROLE; *MANUALS; *NATURAL RESOURCES; PLANNING; *PROBLEM SOLVING; REFERENCE MATERIALS; NATURAL GAS; *RESOURCE MANAGEMENT

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$6.01 PLUS POSTAGE.

DESCRIPTIVE NOTE: 113P.; CONTAINS OCCASIONAL SMALL, LIGHT AND BROKEN TYPE

ISSUE: RIEJUL77

ABSTRACT: THE DEPARTMENT OF COMMERCE CREATED A NATURAL GAS ACTION GROUP EARLY IN THE FALL OF 1975 TO ASSIST INDUSTRIAL FIRMS AND THE COMMUNITIES THEY SERVE TO COPE WITH THE EFFECTS OF POTENTIALLY SEVERE AND CRIPPLING CURTAILMENT SITUATIONS. THIS ACTION GROUP WAS TRAINED TO ASSESS A SPECIFIC LOCAL SITUATION, REVIEW THE POTENTIAL FOR REMEDIAL ACTION AND ALTERNATE ENERGY SOURCES, AND TO ASSIST IN THE IMPLEMENTATION OF REMEDIAL ACTION PLANS. THIS HANDBOOK WAS

DEVELOPED FOR USE BY THIS TEAM IN THE FIELD AND HAS BEEN UPDATED FOR THE 1976-77 SEASON. THE FIRST FOUR SECTIONS PROVIDE BUILDING BLOCKS ESSENTIAL TO THE UNDERSTANDING OF THE PROBLEMS ENCOUNTERED IN THE DEVELOPMENT OF A STRATEGY. THEY ARE: (1) TECHNICAL AND PHYSICAL DATA; (2) GOVERNMENTAL ORGANIZATIONS AND PROCEDURES; (3) GOVERNMENTAL AND INDUSTRIAL ORGANIZATIONS; AND (4) THE GAS INDUSTRY; ALTERNATE RESOURCES, AND INDUSTRIAL RESOURCES. THE LAST SECTION PROVIDES A FRAMEWORK FOR ASSEMBLING DATA AND ASSESSING AND MANAGING A CURTAILMENT. A GLOSSARY IS ALSO INCLUDED. (RM)

INSTITUTION NAME: OFFICE OF ENERGY PROGRAMS (DOC), WASHINGTON, D.C.

ACCESSION NUMBER: ED135664

CLEARINGHOUSE ACCESSION NUMBER: SE022179

PUBLICATION DATE: MAR 77

TITLE: THE DEVELOPMENT AND USE OF AN ENERGY ENVIRONMENT ASSESSMENT INSTRUMENT.

PERSONAL AUTHOR: FAZIO, FRANK; DUNLOP, DAVID L.

DESCRIPTORS: *ACHIEVEMENT; EDUCATIONAL RESEARCH; *ENERGY; *ENVIRONMENT; *ENVIRONMENTAL EDUCATION; *HIGHER EDUCATION; *INSTRUCTION; RESEARCH REPORTS

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$1.67 PLUS POSTAGE.

DESCRIPTIVE NOTE: 16P.; PAPER PRESENTED AT THE ANNUAL MEETING OF THE NATIONAL ASSOCIATION FOR RESEARCH IN SCIENCE TEACHING (50TH, CINCINNATI, OHIO, MARCH 22-24, 1977); CONTAINS OCCASIONAL LIGHT AND BROKEN TYPE

ISSUE: RIEJUL77

ABSTRACT: THE PURPOSE OF THIS INVESTIGATION WAS TO ASSESS THE GENERAL BACKGROUND KNOWLEDGE OF THE COLLEGE NON-SCIENCE MAJOR WITH RESPECT TO ENERGY-ENVIRONMENTAL FACTS AND CONCEPTS. IT WAS HYPOTHESIZED THAT IN GENERAL, COLLEGE STUDENTS HAVE A RATHER POOR BACKGROUND IN AND LACK AN UNDERSTANDING OF THE CURRENT ENERGY CRISES AND THE RELATED ENVIRONMENTAL IMPACTS OF ENERGY USE. SINCE THE HYPOTHESIS WAS LATER FOUND TO BE TRUE (ACCEPTED), THE SECOND PURPOSE OF THIS STUDY WAS TO DEVELOP A TWO-WEEK SIX-LECTURE PRESENTATION ON "ENERGY AND THE ENVIRONMENT" AS PART OF A COURSE IN PHYSICAL SCIENCE FOR NON-SCIENCE MAJORS. A PRETEST AND POSTTEST DESIGN WAS USED AND THE TREATMENT GROUP SHOWED SIGNIFICANT GAIN SCORES (0.01 LEVEL). (RM)

ACCESSION NUMBER: ED136325

CLEARINGHOUSE ACCESSION NUMBER: EA008998

PROGRAM AREA: 95

PUBLICATION DATE: 77

TITLE: THE BEST OF THE BEST OF ERIC.

INSTITUTION CODE: SJJ69850

SPONSORING AGENCY CODE: BBB06021

DESCRIPTORS: ADMINISTRATOR EVALUATION; ADVISORY COMMITTEES; *ANNOTATED BIBLIOGRAPHIES; COMMUNITY EDUCATION; CONFLICT RESOLUTION; CURRICULUM PLANNING; DECISION MAKING; DECLINING ENROLLMENT; *EDUCATIONAL ADMINISTRATION; EDUCATIONAL ALTERNATIVES; ELEMENTARY SECONDARY EDUCATION; ENERGY CONSERVATION; FUTURES (OF SOCIETY); GRIEVANCE PROCEDURES; LEADERSHIP STYLES; *LITERATURE REVIEWS; MANAGEMENT BY OBJECTIVES; MIDDLE SCHOOLS; NEEDS ASSESSMENT; SCHOOL INTEGRATION; STUDENT RIGHTS; TEXTBOOK SELECTION; VANDALISM

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$6.01 PLUS POSTAGE.

DESCRIPTIVE NOTE: 114P.; FOR INDIVIDUAL CHAPTERS OF THIS DOCUMENT, SEE EA 009 251-270

ISSUE: RIEAUG77

ABSTRACT: THIS ANNOTATED BIBLIOGRAPHY IS INTENDED FOR USE AS A REFERENCE VOLUME BY EDUCATIONAL ADMINISTRATORS. IT CONTAINS 321 ANNOTATIONS OF DOCUMENTS AND JOURNAL ARTICLES, ALL OF WHICH ARE INDEXED IN THE ERIC SYSTEM. THE CHAPTERS COVER 20 TOPICS OF CURRENT INTEREST TO THE PRACTITIONER. THE MATERIALS ANNOTATED WERE SELECTED TO GIVE THE READER A GOOD IDEA OF THE MAJOR ISSUES AND PROPOSED SOLUTIONS IN EACH OF THE 20 FIELDS. (AUTHOR)

CONTRACT NUMBER: OEC-0-8-080353-3514

AVAILABILITY: ERIC CLEARINGHOUSE ON EDUCATIONAL MANAGEMENT, UNIVERSITY OF OREGON, EUGENE, OREGON 97403 ($5.95 PREPAID, MAKE CHECKS PAYABLE TO ERIC/CEM PUBLICATIONS)

INSTITUTION NAME: OREGON UNIV., EUGENE. ERIC CLEARINGHOUSE ON EDUCATIONAL MANAGEMENT.

SPONSORING AGENCY NAME: NATIONAL INST. OF EDUCATION (DHEW), WASHINGTON, D.C.

ACCESSION NUMBER: ED136350

CLEARINGHOUSE ACCESSION NUMBER: EA009261

PROGRAM AREA: 95

PUBLICATION DATE: 77

TITLE: ENERGY CONSERVATION.

INSTITUTION CODE: SJJ69850

SPONSORING AGENCY CODE: BBB06021

DESCRIPTORS: *ANNOTATED BIBLIOGRAPHIES; EDUCATIONAL ADMINISTRATION; ELEMENTARY SECONDARY EDUCATION; *ENERGY CONSERVATION

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 5P.; CHAPTER 11 OF "THE BEST OF THE BEST OF ERIC," EA 008 998

ISSUE: RIEAUG77

ABSTRACT: THIS CHAPTER OF "THE BEST OF THE BEST OF ERIC" CONTAINS 14 ANNOTATIONS OF DOCUMENTS AND JOURNAL ARTICLES ON ENERGY CONSERVATION, ALL OF WHICH ARE INDEXED IN THE ERIC SYSTEM. MATERIALS ON TEACHING ENERGY CONSERVATION TO STUDENTS, THE ENERGY CRISIS AND ITS IMPACT ON SCHOOL FINANCES, BUILDING HEATING AND COOLING, AND OTHER TOPICS ARE ANNOTATED. (DS)

CONTRACT NUMBER: OEC-0-8-080353-3514

AVAILABILITY: NOT AVAILABLE SEPARATELY, SEE EA 008 998

INSTITUTION NAME: OREGON UNIV., EUGENE. ERIC CLEARINGHOUSE ON EDUCATIONAL MANAGEMENT.

SPONSORING AGENCY NAME: NATIONAL INST. OF EDUCATION (DHEW), WASHINGTON, D.C.

ACCESSION NUMBER: ED136443

CLEARINGHOUSE ACCESSION NUMBER: EA009384

PUBLICATION DATE: 75

TITLE: SOLAR HEATING PROOF-OF-CONCEPT EXPERIMENT FOR A PUBLIC SCHOOL BUILDING.

PERSONAL AUTHOR: MERRILL, GLEN L.

INSTITUTION CODE: BBB12045

SPONSORING AGENCY CODE: BBB10350

DESCRIPTORS: DATA COLLECTION; ENERGY CONSERVATION; EQUIPMENT; *EXPERIMENTS; *HEATING; *HEAT RECOVERY; INSTRUMENTATION; MEASUREMENT TECHNIQUES; PERFORMANCE SPECIFICATIONS; *PROGRAM DEVELOPMENT; *SOLAR RADIATION

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 108P.; FOR A RELATED DOCUMENT, SEE ED 100 003; NOT AVAILABLE IN HARD COPY DUE TO PRINT QUALITY OF ORIGINAL

ISSUE: RIEAUG77

ABSTRACT: RESULTS AND CONCLUSIONS TO DATE OF A PROGRAM TO DESIGN, ERECT, AND TEST A 5,000-SQUARE-FOOT SOLAR ENERGY SYSTEM ARE PRESENTED IN THIS REPORT. THE PROGRAM DESCRIBED DEMONSTRATES THE ABILITY OF SOLAR COLLECTORS TO SUPPLEMENT THE HEATING AND HOT WATER REQUIREMENTS OF NORTH VIEW JUNIOR HIGH SCHOOL IN SUBURBAN MINNEAPOLIS. THE REPORT DISCUSSES IN DETAIL THE COLLECTOR DESIGN, SYSTEM DESIGN, SYSTEM OPERATION, AND SYSTEM PERFORMANCE. THE BASIC RATIONALE FOR THE PROGRAM IS THE NECESSITY OF OBTAINING FIRM ANSWERS IN THREE AREAS: (1) VALIDATION OF SYSTEM PERFORMANCE; (2) DETERMINATION OF OVERALL SYSTEM COSTS, AND (3) ACQUISITION OF DATA TO DETERMINE THE BENEFITS OF SUCH A SYSTEM. THE PROGRAM IS OBTAINING ENGINEERING DATA THAT MAY BE USED TO IMPROVE COLLECTOR PERFORMANCE AND SYSTEM PERFORMANCE OR DESIGN. IN ADDITION, DATA ARE BEING COMPILED THAT MAY BE USED TO DEFINE INVESTMENT REQUIREMENTS FOR SIMILAR INSTALLATIONS. THE PROGRAM IS ALSO HELPING TO DETERMINE COMMUNITY ACCEPTANCE OF SOLAR HEATED SCHOOL BUILDINGS. TESTING AT THE SITE IS CONTINUING ON A DAY-BY-DAY BASIS TO OBTAIN ADDITIONAL DATA ON SYSTEM PERFORMANCE AND BENEFITS. (AUTHOR/MLF)

REPORT NUMBER: NSF-RA-N-74-119

CONTRACT NUMBER: NSF-C-870

AVAILABILITY: SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON, D.C. 20402 (STOCK NO. 038-000-00242-2, $2.25)

INSTITUTION NAME: HONEYWELL, INC., MINNEAPOLIS, MINN. SYSTEMS AND RESEARCH CENTER.

SPONSORING AGENCY NAME: NATIONAL SCIENCE FOUNDATION, WASHINGTON, D.C. RANN PROGRAM.

ACCESSION NUMBER: ED137040

CLEARINGHOUSE ACCESSION NUMBER: RC009818

PUBLICATION DATE: 77

TITLE: 1976 ANNUAL REPORT (INCLUDING TRANSITION QUARTER) -- APPALACHIAN REGIONAL COMMISSION.

PERSONAL AUTHOR: KENDRICK, ELISE F., ED.; AND OTHERS

INSTITUTION CODE: BBB00078

DESCRIPTORS: ANNUAL REPORTS; CHILD DEVELOPMENT; COMMUNITY DEVELOPMENT; *ECONOMIC DEVELOPMENT; EDUCATIONAL PROGRAMS; ENERGY; HEALTH; HOUSING; INCOME; LABOR FORCE; LAND USE; NATURAL RESOURCES; POPULATION TRENDS; *RURAL AREAS; *SOCIAL SERVICES; *TABLES (DATA); *TRANSPORTATION; *APPALACHIA; *APPALACHIAN REGIONAL COMMISSION

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$8.69 PLUS POSTAGE.

DESCRIPTIVE NOTE: 161P.; FOR RELATED DOCUMENTS, SEE ED 107 915, ED 124 369

ISSUE: RIEAUG77

ABSTRACT: COVERING THE 1976 FISCAL YEAR AND THE ONE-TIME TRANSITION QUARTER OF JULY 1, 1976 THROUGH SEPTEMBER 30, 1976, THIS ANNUAL REPORT ON THE APPALACHIAN REGIONAL COMMISSION (ARC) PRESENTS NARRATIVE AND TABULAR DATA RE: (1) A YEAR OF STRENGTHENING THE PARTNERSHIP (HIGHLIGHTS ON THE FEDERAL, STATE, AND LOCAL PARTNERSHIP WHICH CONSTITUTES ARC); (2) GROWTH (TRANSPORTATION, HOUSING AND COMMUNITY

DEVELOPMENT, AND ENTERPRISE DEVELOPMENT); (3) HUMAN SERVICES (HEALTH, EDUCATION, AND CHILD DEVELOPMENT); (4) THE LAND (ENERGY, ENVIRONMENT, AND NATURAL RESOURCES); (5) DEVELOPMENT AT THE LOCAL LEVEL: (6) FINANCES; (7) APPENDICES (PROJECT TOTALS APPROVED; POPULATION, LABOR FORCE, UNEMPLOYMENT, AND INCOME STATISTICS; AND LOCAL DEVELOPMENT DISTRICT LIST AND MAP). AMONG THE 1976 HIGHLIGHTS REPORTED HERE ARE: THE STRENGTHENING OF THE DEVELOPMENT AND PLANNING PROCESS VIA MORE TIGHTLY CONTROLLED STATE PLANNING; INCREASED LOCAL PARTICIPATION, AND PREPARATION FOR DEVELOPMENT OF A REGIONAL PLAN; EXTENSION OF THE NONHIGHWAY PROGRAMS THROUGH FISCAL YEAR 1979 AND THE HIGHWAY PROGRAMS THROUGH FISCAL YEAR 1981; DEVELOPMENT OF AREAWIDE ACTION PROGRAMS AMONG SOME OF THE LOCAL DEVELOPMENT DISTRICTS; PREPARATION OF "QUESTIONS FOR APPALACHIA", A PRELIMINARY DOCUMENT RE THE REGIONAL PLAN THAT IDENTIFIES CONDITIONS AND ISSUES; A RESOLUTION COMING OUT OF THE ENERGY SYMPOSIUM TO ACCELERATE ROADWAY CONSTRUCTION ESSENTIAL TO ENERGY RESOURCE TRANSPORTATION. (JC)

INSTITUTION NAME: APPALACHIAN REGIONAL COMMISSION, WASHINGTON, D.C.

ACCESSION NUMBER: ED137068

CLEARINGHOUSE ACCESSION NUMBER: SE021913

PUBLICATION DATE: FEB 76

TITLE: PROCEEDINGS OF THE SEMINAR END-USE REGULATION: BEGINNING THE DEBATE.

PERSONAL AUTHOR: VERMILYE, GRETCHEN, ED.; BLANPIED, WILLIAM A., ED.

INSTITUTION CODE: FG601540

SPONSORING AGENCY CODE: GPX27600

DESCRIPTOR: *CONFERENCE REPORTS; CONSERVATION (ENVIRONMENT); ECOLOGY; *ENERGY; *ENERGY CONSERVATION; ENVIRONMENT; *ENVIRONMENTAL CRITERIA; FEDERAL STATE RELATIONSHIP; *POLICY FORMATION; *REGIONAL PLANNING; *MINNESOTA

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$6.01 PLUS POSTAGE.

DESCRIPTIVE NOTE: 116P.; CONTAINS OCCASIONAL LIGHT TYPE

ISSUE: RIEAUG77

ABSTRACT: REPORTED ARE THE PROCEEDINGS OF AN ENERGY END-USE REGULATION SEMINAR HELD IN OCTOBER, 1975, AT CHANHASSEN, MINNESOTA TO REVIEW THE POSSIBILITIES AND EFFECTS OF IMPLEMENTING ENERGY USE LEGISLATION IN THE STATE OF MINNESOTA. THIS CONFERENCE WAS ONE OF FOUR SEMINARS HELD BY THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE THROUGHOUT THE UNITED STATES IN 1975 AND 1976 REGARDING REGIONAL ENERGY POLICY PLANNING. (SL)

REPORT NUMBER: AAAS-PUB-76-R-1

AVAILABILITY: AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE, 1776 MASSACHUSETTS AVENUE, N.W., WASHINGTON, D.C. 20036 (FREE)

INSTITUTION NAME: AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE, WASHINGTON, D.C.

SPONSORING AGENCY NAME: FORD FOUNDATION, NEW YORK, N.Y.

ACCESSION NUMBER: ED137075

CLEARINGHOUSE ACCESSION NUMBER: SE022012

PUBLICATION DATE: 76

TITLE: ENERGY AND OHM OR IF YOU CAN'T TRUST THE LAW OF CONSERVATION OF ENERGY, WHO CAN YOU TRUST?

PERSONAL AUTHOR: TERRY, MARK; WITT, PAUL

INSTITUTION CODE: BB814317

DESCRIPTOR: *ENERGY; *ENVIRONMENT; *INSTRUCTIONAL MATERIALS; *NATURAL RESOURCES; SECONDARY EDUCATION; *SECONDARY SCHOOL SCIENCE; *TEACHING GUIDES

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 47P.; NOT AVAILABLE IN HARD COPY DUE TO COPYRIGHT RESTRICTIONS

ISSUE: RIEAUG77

ABSTRACT: THIS INSTRUCTIONAL PROGRAM IS DESIGNED TO BE USED WITH GRADE 10 STUDENTS FOR 4 TO 5 WEEKS TO HELP STUDENTS TO PREDICT WHAT WILL HAPPEN IN A GIVEN ENERGY SITUATION. IT IS DESIGNED TO LEAD STUDENTS TO AN UNDERSTANDING OF THEIR PERSONAL ENERGY USE TO A REALIZATION OF THE MORAL NATURE OF THE ASSUMPTIONS UNDERLYING ENERGY DECISIONS, AND TO A BELIEF THAT THEY CAN AND SHOULD PARTICIPATE IN DECISIONS AFFECTING THEIR LIVES. MATERIALS INCLUDE: (1) UNDERSTANDING ENERGY AND UNDER - AN ACTIVITY; (2) ENERGY AND ORDER PRIMER - PRESENTATION; (3) THE NUCLEAR ACCIDENT - PRESENTATION; (4) THE AUTOMOBILE ACCIDENT - PRESENTATION; (5) THE POPULATION ACCIDENT - PRESENTATION; (6) UNDERSTANDING WHAT'S ON THE BILL - AN ACTIVITY; (7) UNDERSTANDING WHAT'S IN THE CONTAINER - AN ACTIVITY; (8) THE GREEN REVOLUTION - PRESENTATION; AND (9) WHAT'S KEEPING US - PRESENTATION. (RH)

AVAILABILITY: FRIENDS OF THE EARTH, 124 SPEAR STREET, SAN FRANCISCO, CA 94105 (NO PRICE QUOTED)

INSTITUTION NAME: FRIENDS OF THE EARTH FOUNDATION, SAN FRANCISCO, CALIF.

ACCESSION NUMBER: ED137100

CLEARINGHOUSE ACCESSION NUMBER: SE022303

PUBLICATION DATE: JAN 77

TITLE: IDEAS AND ACTIVITIES FOR TEACHING ENERGY CONSERVATION: GRADES 7-12.

PERSONAL AUTHOR: WERT, JONATHAN; AND OTHERS

INSTITUTION CODE: BB813392

SPONSORING AGENCY CODE: XIE86071; XIE86197

DESCRIPTOR: *CONSERVATION EDUCATION; *ENERGY; *INSTRUCTIONAL MATERIALS; INTERDISCIPLINARY APPROACH; LANGUAGE ARTS; *NATURAL RESOURCES; SCIENCES; *SECONDARY EDUCATION; SOCIAL STUDIES; TEACHING GUIDES

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 223P.; NOT AVAILABLE IN HARD COPY DUE TO COLORED PAGES THROUGHOUT ENTIRE DOCUMENT

ISSUE: RIEAUG77

ABSTRACT: THIS PUBLICATION CONTAINS A VARIETY OF IDEAS AND MATERIALS FOR TEACHING ABOUT ENERGY IN GRADES 7-12. TOPIC AREAS INCLUDE: (1) HISTORICAL PERSPECTIVE ON ENERGY; (2) ENERGY RESOURCES; (3) ENERGY CONSERVATION; (4) IDEAS AND ACTIVITIES; AND (5) APPENDICES. THE FIRST THREE SECTIONS PROVIDE BACKGROUND INFORMATION ON ENERGY AND CONSERVATION. THE ACTIVITIES INCLUDE IDEAS TO USE IN SCIENCE, SOCIAL STUDIES, LANGUAGE ARTS, AND MULTIDISCIPLINARY AREAS. THE APPENDICES INCLUDE A VARIETY OF USEFUL TABLES OF DATA, BASIC INFORMATION ON ENERGY, A GLOSSARY, AND A BIBLIOGRAPHY. (RH)

INSTITUTION NAME: TENNESSEE UNIV., KNOXVILLE. ENVIRONMENT CENTER.

SPONSORING AGENCY NAME: TENNESSEE STATE DEPT. OF EDUCATION, NASHVILLE.; TENNESSEE UNIV., KNOXVILLE. STATE AGENCY FOR TITLE I.

ACCESSION NUMBER: ED137187

CLEARINGHOUSE ACCESSION NUMBER: SO009904

PROGRAM AREA: 95

PUBLICATION DATE: 75

TITLE: MAN, EDUCATION, AND SOCIETY: THE YEAR 2000. A REPORT OF THE 1974 INSTITUTE FOR CHIEF STATE SCHOOL OFFICERS.

PERSONAL AUTHOR: VENN, GRANT, ED.

INSTITUTION CODE: BB803714; IEE29025

SPONSORING AGENCY CODE: RMQ66000

DESCRIPTOR: EDUCATIONAL FINANCE; *EDUCATIONAL NEEDS; EDUCATIONAL PROBLEMS; ELEMENTARY SECONDARY EDUCATION; ENERGY CONSERVATION; FOOD; *FUTURES (OF SOCIETY); *GLOBAL APPROACH; HUMAN RESOURCES; *INSTITUTIONAL ROLE; MANPOWER DEVELOPMENT; POPULATION GROWTH; *SOCIAL PROBLEMS; TECHNOLOGY

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$7.35 PLUS POSTAGE.

DESCRIPTIVE NOTE: 148P.; COLLECTION OF SPEECHES PRESENTED AT THE 5TH ANNUAL CHIEF STATE SCHOOL OFFICERS INSTITUTE (JACKSON HOLE, WYOMING, JULY 25-AUGUST 2, 1974)

ISSUE: RIEAUG77

ABSTRACT: SEVEN SPEECHES, WHICH WERE PRESENTED AT THE FIFTH ANNUAL CHIEF STATE SCHOOL OFFICERS INSTITUTE IN 1974, EXAMINE THE RELATIONSHIPS AMONG MAN, EDUCATION, AND SOCIETY IN THE FUTURE. IN "THE PSYCHOLOGY OF THE FUTURE," ALVIN TOFFLER DESCRIBES THE TRADITIONAL ROLE OF EDUCATIONAL INSTITUTIONS AS MAINTAINERS OF A PREDICTABLE SOCIETY AND POINTS OUT THAT CONTEMPORARY EDUCATION MUST PREPARE YOUNGSTERS FOR A NON-PREDICTABLE FUTURE. IN "MANPOWER AND HUMAN RESOURCE NEEDS," WILLARD WIRTZ IDENTIFIES UNEMPLOYMENT, CHANGING ROLE OF WOMEN IN THE WORK FORCE, AND NEED FOR CONTINUING EDUCATION AS PROBLEMS TO BE SOLVED. "DANGEROUSLY PROVINCIAL" BY FREDERICK CHAMPION WARD STRESSES THE NEED FOR INTERNATIONAL PERSPECTIVES ON ENERGY USE, FOOD PRODUCTION, RESOURCE DEVELOPMENT, AND POPULATION CONTROL. ALLAN K. CAMPBELL REVIEWS THE HISTORY, CURRENT TRENDS, AND FUTURE NEEDS OF EDUCATIONAL FINANCE IN "THE POLITICS AND ECONOMICS OF THE FUTURE FINANCING OF PUBLIC EDUCATION." "THE SHAPE OF DEMOCRACY--THE CITIZEN ROLE" BY FORBES BOTTOMLY STRESSES THAT HUMAN VALUES AND POLITICAL CHOICES INFLUENCE THE FUTURE, NOT CONTINUED APPLICATION OF TECHNOLOGY. IN "THE PUBLIC AND PRIVATE LIFE OF THE INDIVIDUAL," HAROLD G. SHANE SEES POPULATION EXPANSION, TECHNOLOGY, COMING FOOD CRISES, AND GROUP VALUES AS INFLUENCING PERSONAL SECURITY. "ENERGY IN NATURE AND SOCIETY" BY CHARLES RYAN EXPLAINS HOW TRADITIONAL CURRICULUM HAS FOSTERED VALUES THAT NOW CONFLICT WITH OUR FINITE ENERGY AND RESOURCES. (AUTHOR/AV)

INSTITUTION NAME: GEORGIA STATE DEPT. OF EDUCATION, ATLANTA.; GEORGIA STATE UNIV., ATLANTA.

SPONSORING AGENCY NAME: OFFICE OF EDUCATION (DHEW), WASHINGTON, D.C.

ACCESSION NUMBER: ED139372

CLEARINGHOUSE ACCESSION NUMBER: IR004517

PUBLICATION DATE: DEC 76

TITLE: INVENTORY OF INFORMATION RESOURCES AND SERVICES AVAILABLE TO THE U.S. HOUSE OF REPRESENTATIVES. PART IV: PRIVATE ORGANIZATION RESOURCES.

DESCRIPTOR: AGRICULTURE; CITY PROBLEMS; COMMUNICATIONS; CONSUMER ECONOMICS; CURRENT EVENTS; ECONOMICS; EDUCATION; ENERGY; ENVIRONMENT; FUTURES (OF SOCIETY); GOVERNMENT PUBLICATIONS; HUMAN RESOURCES; *INFORMATION NEEDS;

*INFORMATION SERVICES; *INFORMATION SOURCES; INTERNATIONAL RELATIONS; JUSTICE; LABOR; LEGISLATURE; MINORITY GROUPS; NATURAL RESOURCES; POLITICS; *PRIVATE AGENCIES; PROFESSIONAL ASSOCIATIONS; TECHNOLOGY; TRANSPORTATION; UNIVERSITIES; VOLUNTARY AGENCIES; *HOUSE OF REPRESENTATIVES

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 311P.; FOR RELATED DOCUMENTS, SEE IR 004 214-217 ; NOT AVAILABLE IN HARD COPY DUE TO SMALL PRINT OF THE ORIGINAL DOCUMENT

ISSUE: RIEOCT77

ABSTRACT: PURSUANT TO SECTION 20* OF HOUSE RESOLUTION 988, 93RD CONGRESS, THIS ANNOTATED INVENTORY OF PRIVATE ORGANIZATION INFORMATION RESOURCES AVAILABLE TO THE HOUSE OF REPRESENTATIVES IS PART OF A LARGER PROJECT INTENDED TO STUDY THE INFORMATION NEEDS AND PROBLEMS OF THE HOUSE IN RELATION TO EXISTING INSTITUTIONS AND SERVICES. PRIVATE SECTOR ORGANIZATIONS ARE CATEGORIZED AS FOUNDATIONS; NON-PROFIT ORGANIZATIONS; SCHOLARLY AND PROFESSIONAL SOCIETIES; BUSINESS, LABOR AND TRADE ASSOCIATIONS; UNIVERSITIES; AND FOR-PROFIT CORPORATIONS. INFORMATION RESOURCES ARE LISTED IN THE FOLLOWING CONTENT AREAS: AGRICULTURE, COMMUNICATIONS, CONSUMER AFFAIRS, CURRENT EVENTS INFORMATION, ECONOMICS, EDUCATION, ENERGY ENVIRONMENT, FUTURES RESEARCH, HUMAN RESOURCES, INDUSTRY AND BUSINESS, INTERNATIONAL RELATIONS, JUSTICE, LABOR, MINORITIES, NATIONAL DEFENSE, NATURAL RESOURCES, POLITICAL SYSTEM, SCIENCE AND TECHNOLOGY, TRANSPORTATION, AND URBAN AFFAIRS. (SFS)

AVAILABILITY: SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON, D.C. 20402

ACCESSION NUMBER: ED139670

CLEARINGHOUSE ACCESSION NUMBER: SE022608

PUBLICATION DATE: MAR 77

TITLE: ENERGY: THE SOLAR PROSPECT. WORLDWATCH PAPER 11.

PERSONAL AUTHOR: HAYES, DENIS

INSTITUTION CODE: BBB1310B

DESCRIPTOR: DEPLETED RESOURCES; *ENERGY; ENVIRONMENT; *ENVIRONMENTAL INFLUENCES; FUELS; *FUTURES (OF SOCIETY); NATURAL RESOURCES; *SOLAR RADIATION; *TECHNOLOGY; *WORLD PROBLEMS; *SOLAR ENERGY

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 83P.; PARTS MAY BE MARGINALLY LEGIBLE DUE TO SMALL TYPE

ISSUE: RIEOCT77

ABSTRACT: THIS PAPER, ONE OF A SERIES PUBLISHED BY THE WORLDWATCH INSTITUTE TO IDENTIFY AND FOCUS ATTENTION ON GLOBAL PROBLEMS, IS ADAPTED FROM THE AUTHOR'S BOOK, "RAYS OF HOPE: THE TRANSITION TO A POST-PETROLEUM WORLD." THE AUTHOR EXAMINES THE CURRENT ENERGY PROBLEMS OF THE WORLD, AND DETERMINES THAT THE ENERGY PATTERNS OF THE PAST ARE NOT THE PROLOGUE TO THE FUTURE. THE INADEQUACIES ASSOCIATED WITH ENERGY ALTERNATIVES TO PETROLEUM, SUCH AS COAL AND NUCLEAR FUSION, ARE IDENTIFIED AND DISCUSSED. THUS, SOCIETY IS LEFT WITH ONLY THE SOLAR OPTIONS: WIND, FALLING WATER, BIOMASS, AND DIRECT SUNLIGHT. THE HISTORICAL DEVELOPMENT, TECHNOLOGY, AND CURRENT STATUS OF EACH OF THE SOLAR OPTIONS IS DETAILED. THE SOCIAL AND POLITICAL RAMIFICATIONS OF THE CONVERSION TO A SOCIETY BASED ON SOLAR ENERGY ARE HYPOTHESIZED. THE AUTHOR CONCLUDES THAT THE CONVERSION TO SOLAR ENERGY IS TECHNICALLY FEASIBLE, ECONOMICALLY SOUND, AND ENVIRONMENTALLY ATTRACTIVE. (BT)

AVAILABILITY: WORLDWATCH INSTITUTE, 1776 MASSACHUSETTS AVENUE, N.W., WASHINGTON, D.C. 20036 ($2.00)

INSTITUTION NAME: WORLDWATCH INST., WASHINGTON, D.C.

ACCESSION NUMBER: ED139967

CLEARINGHOUSE ACCESSION NUMBER: CE016988

PUBLICATION DATE: JUL 75

TITLE: AMERICAN INDUSTRIES. JUNIOR HI. PRE-VOCATIONAL. POWER AND TRANSPORTATION.

PERSONAL AUTHOR: GOLDSBURY, PAUL; AND OTHERS

INSTITUTION CODE: BBB06654

DESCRIPTOR: *BEHAVIORAL OBJECTIVES; *CAREER EXPLORATION; *CRITERION REFERENCED TESTS; CURRICULUM GUIDES; *ENERGY; ENVIRONMENTAL EDUCATION; FLUID POWER EDUCATION; *INDUSTRY; JUNIOR HIGH SCHOOLS; OCCUPATIONAL INFORMATION; POWER MECHANICS; STUDENT EVALUATION; TRADE AND INDUSTRIAL EDUCATION; *TRANSPORTATION; UNITED STATES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$3.56 PLUS POSTAGE.

DESCRIPTIVE NOTE: 54P.

ISSUE: RIENOV77

ABSTRACT: SEVERAL INTERMEDIATE PERFORMANCE OBJECTIVES AND CORRESPONDING CRITERION MEASURES ARE LISTED FOR EACH OF 10 TERMINAL OBJECTIVES IN THIS JUNIOR HIGH SCHOOL POWER AND TRANSPORTATION COURSE GUIDE. EACH OBJECTIVE ALSO INCLUDES LEARNING STEPS AND SUGGESTIONS FOR SUPPLEMENTARY INSTRUCTIONAL AIDS. THE OVERALL FOCUS IS ON THE CONCEPTS OF INDUSTRIAL ENTERPRISE IN AMERICA, WITH EMPHASIS PLACED ON THE ROLE OF INDUSTRY, MATERIALS, PERSONNEL, PRODUCTION (MASS AND CUSTOM), PROCESSES, ENERGY, MANAGEMENT, DISTRIBUTION, AND OCCUPATIONAL INFORMATION. SUBJECT MATTER AND LEARNING EXPERIENCES ARE ORGANIZED TO ORIENT STUDENTS TO THE INDUSTRIAL CATEGORIES, MANUFACTURING, GRAPHICS, CONSTRUCTION AND POWER, AND TRANSPORTATION. TITLES OF THE 10 TERMINAL OBJECTIVE SECTIONS ARE INTRODUCTION TO POWER, HISTORY OF POWER, SAFETY, WORK--ENERGY--POWER, MACHINES, INTERNAL COMBUSTION, EXTERNAL COMBUSTION, POWER TRANSMISSION, OCCUPATIONS, AND ENVIRONMENTAL ASPECTS. (THIS MANUAL AND 5 OTHERS WERE DEVELOPED FOR VARIOUS SECONDARY LEVEL VOCATIONAL COURSES USING THE SYSTEM APPROACH FOR EDUCATION (SAFE) GUIDELINES.) (HD)

INSTITUTION NAME: DUVAL COUNTY SCHOOL BOARD, JACKSONVILLE, FLA.

ACCESSION NUMBER: ED140011

CLEARINGHOUSE ACCESSION NUMBER: CE011140

PUBLICATION DATE: 76

TITLE: CROSSROADS '76. ADDRESSES AND PROCEEDINGS OF THE NATIONAL AND INTERNATIONAL ANNUAL CONFERENCE OF THE AMERICAN ARTS ASSOCIATION (38TH, 5TH, DES MOINES, IOWA, APRIL 19-23, 1976).

PERSONAL AUTHOR: HANEY, GEORGE M., ED.; AND OTHERS

INSTITUTION CODE: PGK01880

DESCRIPTOR: CAREER EDUCATION; CONFERENCE REPORTS; *CURRICULUM; *EDUCATIONAL RESEARCH; ELEMENTARY SECONDARY EDUCATION; ENERGY; FINANCIAL SUPPORT; FUTURES (OF SOCIETY); GRAPHIC ARTS; *INDUSTRIAL ARTS; *INDUSTRIAL ARTS TEACHERS; INTERDISCIPLINARY APPROACH; METRIC SYSTEM; SAFETY; SPECIAL EDUCATION; SPEECHES; *TEACHER EDUCATION; TEACHING METHODS

EDRS PRICE: EDRS PRICE MF-$1.00 HC-$30.13 PLUS POSTAGE.

DESCRIPTIVE NOTE: 564P.; BEST COPY AVAILABLE

ISSUE: RIENOV77

ABSTRACT: THIS BOOK IS A COMPILATION OF 145 CONFERENCE PAPERS AND PRESENTATIONS ON INDUSTRIAL ARTS EDUCATION COVERING CONTENT IN CAREER EDUCATION, CLASSROOM PROJECTS, CONSTRUCTION, CURRICULUM, ELEMENTARY SCHOOL INDUSTRIAL ARTS, ENERGY, FUNDING PROGRAMS, GRAPHIC COMMUNICATIONS, INTERDISCIPLINARY STUDIES, INTERNATIONAL PERSPECTIVE, PAST-PRESENT-FUTURE, METRICS, MISCELLANEOUS INSTRUCTION, THE PROFESSIONAL TEACHER, RESEARCH, SAFETY, SPECIAL NEEDS PROGRAMS, TEACHER EDUCATION, TEACHING METHODS, TOOLS, AND WOMEN. REPRESENTATIVE TITLES INCLUDE THE FOLLOWING: INDUSTRIAL ARTS AND THE CAREER CHOICE PATTERNS OF JUNIOR HIGH SCHOOL STUDENTS, CONTEMPORARY CONSTRUCTION EDUCATION AND PRACTICE, DEVELOPING A LEADERSHIP AND GROUP INTERACTION SKILLS CURRICULUM, A CONTINUUM OF OBJECTIVES: THE WAY TO MORE SYSTEMATIC INSTRUCTION, INDUSTRIAL ARTS RESOURCE KITS FOR K-6 GRADES, THE URGENCY OF ENERGY EDUCATION, STATUS OF FUNDING IN IDAHO, AN OVERVIEW OF NEW AND FUTURE TECHNOLOGY IN THE GRAPHIC COMMUNICATIONS, STRATEGIES FOR UNIFIED ARTS: A FRAMEWORK FOR ANALYSIS, A RATIONALE FOR INTERNATIONAL TECHNOLOGICAL EDUCATION, CROSSROADS--THE AIRCRAFT CONSTRUCTION ROUTE TO AEROSPACE EDUCATION, TOWARD THE YEAR 2000--FUTURISTICS, INDUSTRIAL ARTS IN THE INDUSTRIAL AND POSTINDUSTRIAL SOCIETY, FREEDOM AND PROFESSIONALISM AND OUR NATIONAL HERITAGE, INDUSTRIAL ARTS RESEARCH: BASIC CONSIDERATIONS, WOOD SURFACE NOISE CONTROL, INDUSTRIAL ARTS IN SPECIAL EDUCATION, MINICOURSES IN INDUSTRIAL EDUCATION, A COMPETENCY-BASED TEACHER EDUCATION PROGRAM: GRAPHIC ARTS, COMPUTER-ASSISTED INSTRUCTION: A STUDENT/MACHINE INTERACTIVE SYSTEM, AND NUMERICAL CONTROLLED EQUIPMENT. CONFERENCE MINUTES AND RESOLUTIONS ARE ALSO INCLUDED. (EM)

AVAILABILITY: AMERICAN INDUSTRIAL ARTS ASSOCIATION, 1201 16TH STREET NW, WASHINGTON, D.C. 20036 ($8.00, CLOTH; $6.00 PAPERBACK; PREPAYMENT REQUIRED)

INSTITUTION NAME: AMERICAN INDUSTRIAL ARTS ASSOCIATION, WASHINGTON, D.C.

ACCESSION NUMBER: ED140423

CLEARINGHOUSE ACCESSION NUMBER: EA009579

PUBLICATION DATE: 77

TITLE: EMERGENCY EDUCATIONAL ASSISTANCE ACT, 1977. HEARINGS BEFORE THE SUBCOMMITTEE ON EDUCATION, ARTS AND HUMANITIES OF THE COMMITTEE ON HUMAN RESOURCES, UNITED STATES SENATE, NINETY-FIFTH CONGRESS, FIRST SESSION ON S. 701 TO PROVIDE FEDERAL FINANCIAL ASSISTANCE TO EDUCATIONAL INSTITUTIONS IN ORDER TO ASSIST SUCH INSTITUTIONS TO MEET THE EMERGENCY CAUSED BY THE HIGH COSTS OF FUEL AND FUEL SHORTAGES AND HARSH WEATHER CONDITIONS, AND FOR OTHER PURPOSES.

INSTITUTION CODE: BBB14655

DESCRIPTOR: *COSTS; *EDUCATIONAL FACILITIES; EDUCATIONAL FINANCE; EDUCATIONAL LEGISLATION; ELEMENTARY SECONDARY EDUCATION; *ENERGY CONSERVATION; *FEDERAL AID; FEDERAL GOVERNMENT; *FEDERAL LEGISLATION; FUEL CONSUMPTION; *HEATING; POST SECONDARY EDUCATION; *EMERGENCY EDUCATIONAL ASSISTANCE ACT

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 311P.; FOR A RELATED DOCUMENT, SEE EA 009 580; NOT AVAILABLE IN HARD COPY DUE TO SMALL TYPE SIZE OF MUCH OF THE DOCUMENT; OCCASIONAL PAGES MAY NOT BE LEGIBLE

ISSUE: RIENOV77

ABSTRACT: THIS PUBLICATION IS A COMPREHENSIVE RECORD OF TESTIMONY AND EXHIBITS PRESENTED TO A SUBCOMMITTEE OF THE COMMITTEE ON HUMAN RESOURCES OF THE U.S. SENATE DURING HEARINGS ON S. 701, THE EMERGENCY EDUCATIONAL ASSISTANCE ACT OF 1977. THE MAIN PURPOSE OF S. 701 IS TO PROVIDE EDUCATIONAL INSTITUTIONS WITH FEDERAL ASSISTANCE TO HELP THEM OFFSET THE COMBINED IMPACT OF HIGH FUEL COSTS, FUEL SHORTAGES, AND HARSH WEATHER DURING THE WINTER OF 1977. SEPARATE HEARINGS WERE CONDUCTED BY THE SUBCOMMITTEE ON FEBRUARY 14, 1977 IN PAWTUCKET, RHODE ISLAND, AND ON MARCH 11, 1977 IN WASHINGTON, D.C. TESTIMONY AND EXHIBITS ARE PRESENTED CHRONOLOGICALLY AND INDEXED ALPHABETICALLY BY WITNESSES' NAMES. (JG)

INSTITUTION NAME: CONGRESS OF THE U.S., WASHINGTON, D.C. SENATE COMMITTEE ON HUMAN RESOURCES.

ACCESSION NUMBER: ED140424

CLEARINGHOUSE ACCESSION NUMBER: EA009580

PUBLICATION DATE: 12 MAY 77

TITLE: EMERGENCY EDUCATIONAL ASSISTANCE ACT. CALENDAR NO. 416. 95TH CONGRESS, 1ST SESSION. SENATE REPORT NO. 95-141. REPORT TO ACCOMPANY S. 701.

INSTITUTION CODE: BB814655

DESCRIPTOR: *COSTS; *EDUCATIONAL FACILITIES; EDUCATIONAL FINANCE; EDUCATIONAL LEGISLATION; ELEMENTARY SECONDARY EDUCATION; *ENERGY CONSERVATION; *FEDERAL AID; FEDERAL GOVERNMENT; *FEDERAL LEGISLATION; FUEL CONSUMPTION; *HEATING; POST SECONDARY EDUCATION; RECORDS (FORMS); *EMERGENCY EDUCATIONAL ASSISTANCE ACT

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 22P.; FOR A RELATED DOCUMENT, SEE EA 009 579; NOT AVAILABLE IN HARD COPY DUE TO SMALL PRINT SIZE OF MOST OF ORIGINAL DOCUMENT

ISSUE: RIENOV77

ABSTRACT: THIS PUBLICATION IS A BRIEF REPORT THAT SUMMARIZES THE DELIBERATIONS AND ACTIONS OF THE U.S. SENATE COMMITTEE ON HUMAN RESOURCES IN CONSIDERING S. 701, THE EMERGENCY EDUCATIONAL ASSISTANCE ACT OF 1977. SEPARATE SECTIONS OF THE REPORT DISCUSS THE BACKGROUND OF S. 701 AS AMENDED BY THE COMMITTEE, THE PURPOSE OF S. 701, THE COMMITTEE'S VOTES ON S. 701 AND ITS VARIOUS AMENDMENTS, ESTIMATED COSTS OF IMPLEMENTING S. 701, THE REGULATORY IMPACT OF S. 701, AND A SECTION-BY-SECTION ANALYSIS OF S. 701. ALSO INCLUDED ARE MODEL APPLICATION FORMS FOR GRANTS UNDER S. 701 AND EXECUTIVE COMMUNICATIONS ON S. 701 FROM THE OFFICE OF MANAGEMENT AND BUDGET AND THE SECRETARY OF HEALTH, EDUCATION, AND WELFARE. (JC)

INSTITUTION NAME: CONGRESS OF THE U.S., WASHINGTON, D.C. SENATE COMMITTEE ON HUMAN RESOURCES.

ACCESSION NUMBER: ED140465

CLEARINGHOUSE ACCESSION NUMBER: EA009631

PUBLICATION DATE: 77

TITLE: ENERGY COST AND CONSUMPTION AUDIT PROGRAM, 1975-76 REPORT.

INSTITUTION CODE: BB813714

SPONSORING AGENCY CODE: BB807296; BB807734; BB809159; FGK01660

DESCRIPTOR: *ACCOUNTING; BUILDING OPERATION; *COMPARATIVE ANALYSIS; EDUCATIONAL FACILITIES; *ENERGY CONSERVATION; *FUEL CONSUMPTION; FUELS; *HEATING; HIGHER EDUCATION; MEASUREMENT; SCHOOL MAINTENANCE; TABLES (DATA); UNIT COSTS

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 90P.

ISSUE: RIENOV77

ABSTRACT: RESULTS REPORTED IN THIS DOCUMENT WERE OBTAINED FROM A QUESTIONNAIRE DISTRIBUTED TO HIGHER EDUCATION BUSINESS OFFICERS AND PHYSICAL PLANT DIRECTORS REQUESTING INFORMATION ON TOTAL CAMPUS AND INDIVIDUAL BUILDING ENERGY COST AND CONSUMPTION FOR THE FISCAL YEAR JULY 1, 1975, THROUGH JUNE 30, 1976. USABLE REPORTS WERE RECEIVED FROM 330 (22 PERCENT) OF THE RESPONDENTS. COMPARATIVE DATA TO IDENTIFY THE IMPACT OF PURCHASED ENERGY ARE CORRELATED WITH SUCH FACTORS AS DEGREE DAYS, SQUARE FOOTAGE, PROGRAM LEVEL, AND STUDENT ENROLLMENT. THE QUESTIONNAIRE INCLUDED A SECTION REQUESTING INFORMATION ON BUILDING ENERGY CONSUMPTION FOR NINE CLASSIFICATIONS OF FACILITIES. THE REPORTED RESULTS ARE INTENDED TO PROVIDE INSTITUTIONS OF HIGHER EDUCATION WITH A FRAME OF REFERENCE ON ENERGY CONSUMPTION THAT WILL ASSIST IN THE IDENTIFICATION OF THOSE FACILITIES THAT APPEAR TO HAVE ABNORMALLY HIGH ENERGY CONSUMPTION AND THUS ARE IN NEED OF CONCENTRATED ENERGY ANALYSIS AND ACTION. (AUTHOR/MLF)

AVAILABILITY: ASSOCIATION OF PHYSICAL PLANT ADMINISTRATORS OF UNIVERSITIES AND COLLEGES, ELEVEN DUPONT CIRCLE, SUITE 250, WASHINGTON, D.C. 20036 ($10.00)

INSTITUTION NAME: ENERGY TASK FORCE, WASHINGTON, D.C.

SPONSORING AGENCY NAME: AMERICAN COUNCIL ON EDUCATION, WASHINGTON, D.C.; ASSOCIATION OF PHYSICAL PLANT ADMINISTRATORS OF UNIVERSITIES AND COLLEGES, WASHINGTON, D.C.; EXXON CORP., NEW YORK, N.Y.; NATIONAL ASSOCIATION OF COLL. AND UNIV. BUSINESS OFFICERS, WASHINGTON, D.C.

ACCESSION NUMBER: ED140508

CLEARINGHOUSE ACCESSION NUMBER: EA009700

PUBLICATION DATE: AUG 75

TITLE: ENERGY CONSERVATION IN NEW BUILDING DESIGN: AN IMPACT ASSESSMENT OF ASHRAE STANDARD 90-75, CONSERVATION AND ENVIRONMENT BUILDINGS PROGRAMS. CONSERVATION NUMBER 438.

INSTITUTION CODE: BB812650; BB814657

DESCRIPTOR: AIR CONDITIONING EQUIPMENT; AIR FLOW; ARCHITECTURAL ELEMENTS; ARCHITECTURAL RESEARCH; *BUILDING DESIGN; BUILDING MATERIALS; CONSTRUCTION INDUSTRY; *ENERGY CONSERVATION; *EVALUATION; FACILITY REQUIREMENTS; FUTURES (OF SOCIETY); HEATING; HEAT RECOVERY; ILLUMINATION LEVELS; *PERFORMANCE SPECIFICATIONS; SOLAR RADIATION; *STANDARDS; TABLES (DATA)

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$18.67 PLUS POSTAGE.

DESCRIPTIVE NOTE: 347P.; SOME TABLES MAY NOT REPRODUCE CLEARLY DUE TO SMALL TYPE SIZE

ISSUE: RIENOV77

ABSTRACT: THE AMERICAN SOCIETY OF HEATING, REFRIGERATING, AND AIR CONDITIONING ENGINEERS (ASHRAE), HAS DEVELOPED A DOCUMENT GOVERNING ENERGY USAGE IN ALL TYPES OF NEW CONSTRUCTION: ASHRAE STANDARD 90-75: ENERGY CONSERVATION IN NEW BUILDING DESIGN (ASHRAE 90). TO LAY THE FOUNDATION FOR AN EVALUATION OF ASHRAE 90, THE FEDERAL ENERGY ADMINISTRATION (FEA) RETAINED ARTHUR D. LITTLE, INC. (ADL), TO INVESTIGATE THE POTENTIAL ENERGY AND ECONOMIC IMPACT THE STANDARD WOULD HAVE ON THE NATION'S CONSTRUCTION INDUSTRY. IT WAS THE INTENT OF THE STUDY TO QUANTIFY THOSE IMPACTS IN THE ENERGY AND ECONOMIC SECTORS AS WELL AS POSSIBLE, AND TO QUALITATIVELY ASSESS THEIR IMPACT IN THE INSTITUTIONAL SECTOR. WITHIN THE REPORT ARE MANY FINDINGS, OBSERVATIONS, AND RECOMMENDATIONS CONCERNING ASHRAE 90'S EFFECT ON BUILDING ENERGY CONSUMPTION, ITS INFLUENCES ON PHYSICAL CHANGES IN THE BUILDINGS, ITS IMPLICATIONS ON THE OWNING AND OPERATING COSTS OF BUILDINGS, ITS POTENTIAL IMPACT ON THE NATION'S ENERGY CONSUMPTION IN CONSTRUCTION, ITS POSSIBLE ECONOMIC IMPACT IN SEVERAL SELECTED MARKETS AND PARTICIPANTS WITHIN THE CONSTRUCTION SECTOR, AND ITS IMPACT ON BUILDING HABITABILITY. (AUTHOR/MLF)

AVAILABILITY: SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT OFFICE, WASHINGTON, D.C. 20402 ($3.35)

INSTITUTION NAME: AMERICAN SOCIETY OF HEATING, REFRIGERATING, AND AIR CONDITIONING ENGINEERS, NEW YORK, N.Y.; FEDERAL ENERGY ADMINISTRATION, WASHINGTON, D.C.

ACCESSION NUMBER: ED140510

CLEARINGHOUSE ACCESSION NUMBER: EA009708

PUBLICATION DATE: MAY 76

TITLE: ENERGY CONSERVATION IN THE FOOD SYSTEM: A PUBLICATIONS LIST.

INSTITUTION CODE: BB814658

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; *ENERGY CONSERVATION; *FOOD; *FOOD HANDLING FACILITIES; *FOOD SERVICE INDUSTRY; FOOD STANDARDS; PUBLICATIONS; TRANSPORTATION

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$4.67 PLUS POSTAGE.

DESCRIPTIVE NOTE: 81P.; PAGE 9 MAY NOT REPRODUCE DUE TO SMALL TYPE SIZE

ISSUE: RIENOV77

ABSTRACT: THIS REPORT CONTAINS AN ANNOTATED LIST OF SELECTED PUBLICATIONS READILY AVAILABLE TO THE PUBLIC ON HOW TO CONSERVE ENERGY IN THE FOOD SYSTEM. IT IS DIVIDED INTO EIGHT SECTIONS, SIX REPRESENTING SECTORS OF THE FOOD SYSTEM, ONE FOR "TRANSPORTATION," AND A SECTION ENTITLED "MULTIPLE SECTOR APPLICATION." THERE ARE CITATIONS IN EACH SECTION, HOWEVER, THAT APPLY TO MORE THAN ONE FOOD SYSTEM SECTOR. EACH PUBLICATION REFERENCE (EXCEPT THOSE FOR MAGAZINES) INCLUDES THE PRICE AND NAME AND ADDRESS OF THE ORGANIZATION THAT DISTRIBUTES IT. MANY OF THE DOCUMENTS ARE AVAILABLE FROM GOVERNMENT AGENCIES. (AUTHOR/MLF)

AVAILABILITY: SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON, D.C. 20402 (STOCK NO. 041-018-00110-7, $1.45)

INSTITUTION NAME: FEDERAL ENERGY ADMINISTRATION, WASHINGTON, D.C. OFFICE OF INDUSTRIAL PROGRAMS.

ACCESSION NUMBER: ED141065

CLEARINGHOUSE ACCESSION NUMBER: SE022300

PUBLICATION DATE: AUG 75

TITLE: ENERGY IN THE CLASSROOM, VOL. I, ACTIVITIES GUIDE FOR K-3.

PERSONAL AUTHOR: ERICKSON, KATHY BAKER; SHERMAN, DEBORAH FICK

INSTITUTION CODE: BB814615

DESCRIPTOR: CONSERVATION EDUCATION; *ELEMENTARY EDUCATION; *ENERGY; ENVIRONMENT; *ENVIRONMENTAL EDUCATION; *INSTRUCTIONAL MATERIALS; LEARNING ACTIVITIES; NATURAL RESOURCES; *TEACHING GUIDES

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 38P.; FOR RELATED DOCUMENTS, SEE SE 022 301-302

ISSUE: RIENOV77

ABSTRACT: THIS BOOKLET IS A TEACHER'S GUIDE FOR TEACHING ABOUT ENERGY, TYPES OF ENERGY, SOURCES OF ENERGY, AND WAYS TO CONSERVE ENERGY. IT IS DESIGNED FOR STUDENTS IN GRADES K-3. INCLUDED ARE A VARIETY OF ACTIVITIES, SHEETS THAT CAN BE COPIED FOR HANDOUTS, AND A BIBLIOGRAPHY OF STUDENT REFERENCES. (RH)

AVAILABILITY: VIRGINIA ENERGY OFFICE, 823 EAST MAIN STREET, RICHMOND, VIRGINIA 23219 (NO PRICE QUOTED)

INSTITUTION NAME: VIRGINIA STATE ENERGY OFFICE, RICHMOND.

ACCESSION NUMBER: ED141066

CLEARINGHOUSE ACCESSION NUMBER: SE022301

PUBLICATION DATE: AUG 75

TITLE: ENERGY IN THE CLASSROOM, VOL. II, ACTIVITIES GUIDE FOR 4-7.

PERSONAL AUTHOR: ERICKSON, KATHY BAKER; SHERMAN, DEBORAH FICK

INSTITUTION CODE: BBB14615

DESCRIPTOR: CONSERVATION EDUCATION; *ELEMENTARY EDUCATION; *ENERGY; ENVIRONMENT; *ENVIRONMENTAL EDUCATION; *INSTRUCTIONAL MATERIALS; LEARNING ACTIVITIES; NATURAL RESOURCES; *TEACHING GUIDES

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 102P.; FOR RELATED DOCUMENTS, SEE SE 022 300-302

ISSUE: RIENOV77

ABSTRACT: THIS BOOKLET IS A TEACHER'S GUIDE FOR TEACHING ABOUT ENERGY, TYPES OF ENERGY, SOURCES OF ENERGY, AND WAYS TO CONSERVE ENERGY. IT IS DESIGNED FOR STUDENTS IN GRADES 4-7. INCLUDED ARE A VARIETY OF ACTIVITIES, SHEETS THAT CAN BE COPIED FOR HANDOUTS, AND A BIBLIOGRAPHY OF STUDENT REFERENCES. (MM)

AVAILABILITY: VIRGINIA ENERGY OFFICE, 823 EAST MAIN ST., RICHMOND, VIRGINIA 23219 (NO PRICE QUOTED)

INSTITUTION NAME: VIRGINIA STATE ENERGY OFFICE, RICHMOND.

ACCESSION NUMBER: ED141067

CLEARINGHOUSE ACCESSION NUMBER: SE022302

PUBLICATION DATE: AUG 75

TITLE: ENERGY IN THE CLASSROOM, VOL. III, ACTIVITIES GUIDE FOR 8-12.

PERSONAL AUTHOR: ERICKSON, KATHY BAKER; SHERMAN, DEBORAH FICK

INSTITUTION CODE: BBB14615

DESCRIPTOR: CONSERVATION EDUCATION; *ENERGY; ENVIRONMENT; ENVIRONMENTAL EDUCATION; *INSTRUCTIONAL MATERIALS; *INTERDISCIPLINARY APPROACH; LEARNING ACTIVITIES; NATURAL RESOURCES; *SECONDARY EDUCATION; *TEACHING GUIDES

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 143P.; FOR RELATED DOCUMENTS, SEE SE 022 300-301

ISSUE: RIENOV77

ABSTRACT: THIS BOOKLET IS A TEACHER'S GUIDE FOR TEACHING ABOUT ENERGY, USES OF ENERGY, SOURCES OF ENERGY, AND WAYS TO CONSERVE ENERGY. THE ACTIVITIES ARE DESIGNED FOR SECONDARY SCHOOL STUDENTS, GRADES 8-12. INCLUDED ARE BACKGROUND INFORMATION, A VARIETY OF ACTIVITIES, SHEETS THAT CAN BE COPIED FOR HANDOUTS, AND A BIBLIOGRAPHY OF STUDENT REFERENCES. (RM)

AVAILABILITY: VIRGINIA ENERGY OFFICE, 823 EAST MAIN ST., RICHMOND, VIRGINIA 23219 (NO PRICE QUOTED)

INSTITUTION NAME: VIRGINIA STATE ENERGY OFFICE, RICHMOND.

ACCESSION NUMBER: ED141069

CLEARINGHOUSE ACCESSION NUMBER: SE022348

PUBLICATION DATE: NOV 75

TITLE: SOCIETAL FACTORS IN THE TEACHING OF CHEMISTRY.

PERSONAL AUTHOR: CHEEK, WILLIAM EDWARD

DESCRIPTOR: *CHEMISTRY; *COLLEGE SCIENCE; *COURSE CONTENT; CURRICULUM; *EDUCATIONAL RESEARCH; ENERGY; HIGHER EDUCATION; POLLUTION; SCIENCE EDUCATION; *SOCIAL PROBLEMS; STUDENT OPINION; RESEARCH REPORTS

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$3.50 PLUS POSTAGE.

DESCRIPTIVE NOTE: 56P.; ED.D. PRACTICUM, NOVA UNIVERSITY; CONTAINS OCCASIONAL MARGINAL LEGIBILITY

ISSUE: RIENOV77

ABSTRACT: THE PURPOSE OF THIS STUDY WAS TO SHOW THAT SOCIETAL PROBLEMS SUCH AS ENERGY AND POLLUTION SHOULD BE INCLUDED AS A CENTRAL AND UNDERLYING THEME IN A COLLEGE CHEMISTRY COURSE. A QUESTIONNAIRE WAS ADMINISTERED TO 156 COLLEGE STUDENTS IN SCIENCE AND TECHNOLOGY TO DETERMINE WHETHER THE STUDENTS FELT THAT THEY WOULD BE MORE HIGHLY MOTIVATED IN CHEMISTRY IF THE SUBJECT MATTER FREQUENTLY INVOLVED THE TOPICS OF ENERGY AND POLLUTION. USING CHI-SQUARE AND T-TEST STATISTICS, IT WAS SHOWN THAT STUDENTS OF ALL AGES IN THE STUDY CONSIDERED ENERGY AND POLLUTION TO BE THE MOST CRITICAL OF ALL SOCIETAL PROBLEMS INCLUDED IN THE QUESTIONNAIRE. OTHER RESULTS OF THE QUESTIONNAIRE SHOWED THAT THE STUDENTS WERE INTERESTED IN PRACTICAL APPLICATIONS OF CHEMICAL PRINCIPLES AND THAT THEY PREFERRED A LABORATORY WITH EMPHASIS ON BOTH PRINCIPLES AND APPLICATIONS. (MM)

ACCESSION NUMBER: ED141121

CLEARINGHOUSE ACCESSION NUMBER: SE022626

PUBLICATION DATE: 74

TITLE: SCIENCE AND THE CHALLENGES AHEAD. REPORT OF THE NATIONAL SCIENCE BOARD.

INSTITUTION CODE: BBB02233

DESCRIPTOR: ENERGY; ENVIRONMENT; HEALTH; *INDUSTRY; MANPOWER NEEDS; NATURAL RESOURCES; *POLICY FORMATION; POPULATION TRENDS; *SCIENTIFIC RESEARCH; SOCIAL PROBLEMS; *TECHNOLOGY; UNIVERSITIES; *WORLD PROBLEMS

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$3.50 PLUS POSTAGE.

DESCRIPTIVE NOTE: 61P.; BEST COPY AVAILABLE

ISSUE: RIENOV77

ABSTRACT: MAN INCREASINGLY INVENTS HIS OWN DESTINY. AMONG THE AREAS CURRENTLY NEEDING URGENT AND SUSTAINED ATTENTION ARE THE FOLLOWING: POPULATION, WORLD FOOD SUPPLY, ENERGY, MATERIALS, CLIMATE, AND THE ENVIRONMENT. THE FACT THAT THE PROBLEMS ARE GLOBAL IN SCOPE INDICATES THEIR PERVASIVE AND FUNDAMENTAL CHARACTER AS WELL AS THE DIFFICULTY CONFRONTING THEM. THE FIRST CHAPTER REVIEWS THE MORE FAMILIAR CHALLENGES AND DISCUSSES GENERAL ASPECTS OF THE NEWER ONES. THE SECOND CHAPTER EXAMINES SEVERAL PROBLEMS ENCOMPASSED IN THE BROADER CHALLENGE OF MAN'S INCREASING POWER. THE NATURE AND SCOPE OF EACH PROBLEM IS DISCUSSED, AND THE PAST AND POTENTIAL ROLE OF SCIENCE AND TECHNOLOGY IN ALLEVIATING THE PROBLEM IS NOTED. THE THIRD CHAPTER EXPLORES THE ADEQUACY OF SCIENCE AND TECHNOLOGY FOR HELPING TO RESPOND TO SUCH PROBLEMS. CANCER AND ENERGY ARE TAKEN AS ILLUSTRATIVE TESTS OF THE PRESENT CAPABILITIES OF SCIENCE AND TECHNOLOGY. THE FOURTH CHAPTER PRESENTS CONCLUSIONS DRAWN FROM THESE ASSESSMENTS. THE FINAL CHAPTER RECOMMENDS ACTIONS AND POLICIES AIMED AT STRENGTHENING THE SCIENTIFIC AND TECHNOLOGICAL RESPONSE TO PRESENT AND FUTURE CHALLENGES. (AUTHOR/RM)

REPORT NUMBER: NSB-74-1

AVAILABILITY: SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON, D.C. 20402 (STOCK NUMBER 038-000-00205, $0.85)

INSTITUTION NAME: NATIONAL SCIENCE FOUNDATION, WASHINGTON, D.C. NATIONAL SCIENCE BOARD.

ACCESSION NUMBER: ED141129

CLEARINGHOUSE ACCESSION NUMBER: SE022634

PUBLICATION DATE: 77

TITLE: THE NATIONAL ENERGY PLAN. SUMMARY OF PUBLIC PARTICIPATION.

INSTITUTION CODE: BBB14595

DESCRIPTOR: CONSERVATION (ENVIRONMENT); *ENERGY; *ENERGY CONSERVATION; *FEDERAL PROGRAMS; *NATIONAL SURVEYS; *POLICY FORMATION; *PUBLIC OPINION; PUBLIC SUPPORT; SURVEYS

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$2.06 PLUS POSTAGE.

DESCRIPTIVE NOTE: 44P.; CONTAINS OCCASIONAL SMALL TYPE

ISSUE: RIENOV77

ABSTRACT: IN MARCH 1977, A PROJECT WAS BEGUN BY THE EXECUTIVE OFFICE OF THE PRESIDENT TO SEEK OUT COMMENTS AND RECOMMENDATIONS FROM THE PUBLIC FOR A COMPREHENSIVE NATIONAL ENERGY PLAN. THREE SIMULTANEOUS APPROACHES WERE USED: (1) TEN REGIONAL TOWN MEETINGS WERE CONDUCTED; (2) TWENTY-ONE SMALL CONFERENCES WERE HELD AT THE WHITE HOUSE; AND (3) A PUBLIC NOTICE WAS PLACED IN THE FEDERAL REGISTER AND SOME 600,000 OF THESE WERE MAILED DIRECTLY TO CITIZENS TO ASK THEIR OPINION. THIS BOOKLET SUMMARIZES THE RESULTS OF THESE THREE APPROACHES. PUBLIC OPINION IN THE POLICY AREAS OF CONSERVATION, SUPPLY DEVELOPMENT, FEDERAL REGULATION, HARDSHIP TO CITIZENS, IMPORTED ENERGY, ENVIRONMENT, CITIZEN PARTICIPATION, AND INTERGOVERNMENTAL RELATIONS IS DISCUSSED. LISTS OF SUGGESTIONS CITIZENS MADE FOR CONSERVING ENERGY ARE INCLUDED. (AJ)

AVAILABILITY: SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON, D.C. 20402 (STOCK NUMBER 040-000-00383-5, NO PRICE QUOTED)

INSTITUTION NAME: EXECUTIVE OFFICE OF THE PRESIDENT, WASHINGTON, D.C. ENERGY POLICY AND PLANNING.

ACCESSION NUMBER: ED141163

CLEARINGHOUSE ACCESSION NUMBER: SE022685

PUBLICATION DATE: 74

TITLE: ENERGY FOR 1970-1990. A LEARNING EXPERIENCE FOR COASTAL AND OCEANIC AWARENESS STUDIES, NO. 315. PROJECT COAST.

INSTITUTION CODE: BBB14665

SPONSORING AGENCY CODE: RM066000

DESCRIPTOR: *ENERGY; ENVIRONMENT; *INSTRUCTIONAL MATERIALS; NATURAL RESOURCES; *SCIENCE; *SECONDARY GRADES; *SOCIAL STUDIES; *TEACHING GUIDES; UNITS OF STUDY; PROJECT COAST

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$1.67 PLUS POSTAGE.

DESCRIPTIVE NOTE: 22P.; FOR RELATED DOCUMENTS, SEE SE 022 662-687

ISSUE: RIENOV77

ABSTRACT: THIS LEARNING EXPERIENCE IS DESIGNED TO BE USED AS A SHORT INTRODUCTION TO ENERGY STUDIES. INCLUDED ARE BACKGROUND MATERIAL (TO BE READ BY STUDENTS); CLASSROOM DISCUSSION IDEAS; CLASSROOM ACTIVITY (TEACHER'S GUIDE AND STUDENT WORKSHEET); AND SELECTED REFERENCES. (RM)

INSTITUTION NAME: DELAWARE UNIV., NEWARK. COLL. OF EDUCATION.

SPONSORING AGENCY NAME: OFFICE OF EDUCATION (DHEW),

WASHINGTON, D.C.

ACCESSION NUMBER: ED141164

CLEARINGHOUSE ACCESSION NUMBER: SE022686

PUBLICATION DATE: 74

TITLE: CONSTRUCTION OF A MODEL SOLAR BUILDING. A LEARNING EXPERIENCE FOR COASTAL AND OCEANIC AWARENESS STUDIES, NO. 318. PROJECT COAST .

INSTITUTION CODE: BB814665

SPONSORING AGENCY CODE: RM066000

DESCRIPTOR: BUILDING DESIGN; *ENERGY; *ENERGY CONSERVATION; *INSTRUCTIONAL MATERIALS; *MODELS; OCEANOLOGY; PHYSICAL SCIENCES; SECONDARY EDUCATION; *SECONDARY SCHOOL SCIENCE; *STUDENT PROJECTS; TEACHING GUIDES; UNITS OF STUDY; PROJECT COAST; *SOLAR ENERGY

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$1.67 PLUS POSTAGE.

DESCRIPTIVE NOTE: 24P.; FOR RELATED DOCUMENTS, SEE SE 022 662-687; CONTAINS OCCASIONAL LIGHT AND BROKEN TYPE

ISSUE: RIENOV77

ABSTRACT: THIS ACTIVITY IS DESIGNED FOR SECONDARY SCHOOL STUDENTS. THE PROCESS OF CONSTRUCTING A MODEL SOLAR BUILDING INCLUDES CONSIDERATION OF MANY FUNDAMENTAL SCIENTIFIC PRINCIPLES, SUCH AS THE NATURE OF HEAT, LIGHT, ELECTRICITY, AND ENERGY CONVERSION TECHNOLOGY. WHEN THE MODEL SOLAR BUILDING IS COMPLETED, THERE ARE NUMEROUS POSSIBILITIES FOR THE USE OF THE MODEL FOR STUDIES OF THE PRINCIPLES OF ENERGY CONVERSION. INCLUDED ARE A DESCRIPTION OF NEEDED MATERIALS AND EQUIPMENT, CONSTRUCTION TIPS, DIAGRAMS TO ASSIST IN THE CONSTRUCTION PROCEDURES, SUGGESTED USES OF THE MODEL, AND SELECTED REFERENCES. (RH)

INSTITUTION NAME: DELAWARE UNIV., NEWARK. COLL. OF EDUCATION.

SPONSORING AGENCY NAME: OFFICE OF EDUCATION (DHEW), WASHINGTON, D.C.

ACCESSION NUMBER: ED141165

CLEARINGHOUSE ACCESSION NUMBER: SE022687

PUBLICATION DATE: 74

TITLE: THERMAL POLLUTION BY NUCLEAR POWER PLANTS. A LEARNING EXPERIENCE FOR COASTAL AND OCEANIC AWARENESS STUDIES, NO. 320. PROJECT COAST .

INSTITUTION CODE: BB814665

SPONSORING AGENCY CODE: RM066000

DESCRIPTOR: BIOLOGY; *ENERGY; *ENVIRONMENT; *INSTRUCTIONAL MATERIALS; OCEANOLOGY; POLLUTION; *SECONDARY GRADES; SECONDARY SCHOOL SCIENCE; SOCIAL STUDIES; *TEACHING GUIDES; WATER POLLUTION CONTROL; LIMNOLOGY; *NUCLEAR POWER PLANTS; PROJECT COAST

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$2.06 PLUS POSTAGE.

DESCRIPTIVE NOTE: 46P.; FOR RELATED DOCUMENTS, SEE SE 022 662-686

ISSUE: RIENOV77

ABSTRACT: THIS PUBLICATION INCLUDES SEVERAL ACTIVITIES REGARDING THE USE OF NUCLEAR POWER PLANTS AND POSSIBLE EFFECTS ON THE ENVIRONMENT. THE MATERIALS ARE DESIGNED FOR SECONDARY SCHOOL STUDENTS AND INCLUDE REFERENCE MATERIALS AND MASTERS FOR TRANSPARENCIES. (RH)

INSTITUTION NAME: DELAWARE UNIV., NEWARK. COLL. OF EDUCATION.

SPONSORING AGENCY NAME: OFFICE OF EDUCATION (DHEW), WASHINGTON, D.C.

ACCESSION NUMBER: ED141186

CLEARINGHOUSE ACCESSION NUMBER: SE022747

PUBLICATION DATE: JUN 77

TITLE: ENERGY: WHO'S DOING WHAT?

PERSONAL AUTHOR: TOWNSEND, ANNE; AND OTHERS

INSTITUTION CODE: BB802076

SPONSORING AGENCY CODE: BB812650

DESCRIPTOR: AGENCIES; CITIZEN PARTICIPATION; COMMUNITY ORGANIZATIONS; *DIRECTORIES; *ENERGY; *ENVIRONMENTAL EDUCATION; INDUSTRY; *ORGANIZATIONS (GROUPS); PARKS; *NATIONAL RECREATION AND PARK ASSOCIATION

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$2.06 PLUS POSTAGE.

DESCRIPTIVE NOTE: 50P.

ISSUE: RIENOV77

ABSTRACT: THIS DOCUMENT, PREPARED FOR THE PEOPLE WHO WORK WITH VISITORS IN NATIONAL, STATE, REGIONAL, AND LOCAL PARKS AS PART OF THE PARK PROJECT ON ENERGY INTERPRETATION, LISTS BY STATE APPROXIMATELY 200 UNITED STATES CITIZEN GROUPS, COMPANIES, AND NON-GOVERNMENT AGENCIES INVOLVED IN SOME TYPE OF ENERGY WORK. THE ORGANIZATIONS INCLUDED WERE SELECTED ON THE BASIS OF HAVING PROGRAMS AND FACILITIES, WHICH MAY BE OF EDUCATIONAL VALUE TO CITIZENS. ONLY GROUPS WHICH AGREED TO ANSWER INQUIRIES WERE INCLUDED. THE ORGANIZATIONS INCLUDED EMBRACE A VARIETY OF PHILOSOPHICAL AND POLITICAL SOLUTIONS TO ENERGY PROBLEMS. FOR EXAMPLE, INCLUDED ARE PRO-NUCLEAR AS WELL AS ANTI-NUCLEAR GROUPS, AND HIGH-TECHNOLOGY ORIENTED CORPORATIONS AS WELL AS THOSE WORKING ON LOW-TECHNOLOGY, SELF-SUFFICIENT APPROACHES. (AUTHOR/BT)

AVAILABILITY: PARK PROJECT ON ENERGY INTERPRETATION, NATIONAL RECREATION AND PARK ASSOC., 1601 NORTH KENT ST., ARLINGTON, VIRGINIA 22209 (FREE)

INSTITUTION NAME: NATIONAL RECREATION AND PARK ASSOCIATION, ARLINGTON, VA.

SPONSORING AGENCY NAME: FEDERAL ENERGY ADMINISTRATION, WASHINGTON, D.C.

ACCESSION NUMBER: ED141187

CLEARINGHOUSE ACCESSION NUMBER: SE022751

PUBLICATION DATE: 77

TITLE: FOSSIL ENERGY: OIL.

PERSONAL AUTHOR: EATON, WILLIAM W.

INSTITUTION CODE: BB813553

DESCRIPTOR: BIBLIOGRAPHIES; *ENERGY; ENERGY CONSERVATION; ENVIRONMENT; FUELS; *HISTORY; INDUSTRY; *PETROLEUM INDUSTRY; *SCIENCES; *TECHNOLOGY; ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION; ERDA; *OIL

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$3.50 PLUS POSTAGE.

DESCRIPTIVE NOTE: 70P.; PHOTOGRAPHS MAY NOT REPRODUCE WELL

ISSUE: RIENOV77

ABSTRACT: DETAILED ARE THE HIGHLIGHTS OF THE HISTORY AND TECHNOLOGY OF CRUDE OIL AND ITS END PRODUCTS. INCLUDED ALSO ARE SOME OF THE IMPORTANT PROGRAMS THAT AMERICAN INDUSTRY AND THE FEDERAL GOVERNMENT ARE PLANNING AND UNDERTAKING IN ORDER TO ENHANCE THE BENEFITS OF OIL AND MAKE USE OF THE LIMITED AVAILABLE QUANTITIES AS WISELY AS POSSIBLE, BOTH NOW AND IN THE FUTURE. A BIBLIOGRAPHY OF ADDITIONAL BOOKS AND ARTICLES ON PETROLEUM IS INCLUDED. (BT)

INSTITUTION NAME: ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION, WASHINGTON, D.C.

ACCESSION NUMBER: ED141193

CLEARINGHOUSE ACCESSION NUMBER: SO009775

PUBLICATION DATE: AUG 76

TITLE: ENERGY AND THE STRUCTURE OF SOCIAL SYSTEM: SIGNIFICANCE FOR FAMILIES.

PERSONAL AUTHOR: KEEFE, DENNIS R.

DESCRIPTOR: BEHAVIORAL SCIENCE RESEARCH; ENERGY; *FAMILY (SOCIOLOGICAL UNIT); FAMILY CHARACTERISTICS; FAMILY ROLE; HUMAN LIVING; INFORMATION NETWORKS; *MODELS; ROLE PERCEPTION; ROLE PLAYING; *SOCIAL SYSTEMS; *SOCIOLOGY

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$1.67 PLUS POSTAGE.

DESCRIPTIVE NOTE: 20P.; PAPER PRESENTED AT ANNUAL MEETING OF THE RURAL SOCIOLOGICAL SOCIETY (NEW YORK, NEW YORK, AUGUST 26-29, 1976)

ISSUE: RIENOV77

ABSTRACT: THE PURPOSE OF THE PAPER IS TO PRESENT A MODEL AND SUGGEST HYPOTHESES RELATING THE FAMILY AS A SOCIAL SYSTEM TO THE CONCEPTS OF HUMAN AND NATURAL ENERGY. HUMAN ENERGY IS INTERPRETED AS THE CAPACITY OF HUMANS, IN THIS CASE, FAMILY MEMBERS, FOR DOING WORK AND NATURAL ENERGY AS RESOURCES SUCH AS NATURAL GAS, CARBON DIOXIDE, AND HEAT. A BEHAVIORAL MODEL OF SOCIAL SYSTEMS BASED UPON 1975 RESEARCH BY SOCIOLOGISTS FREDERICK L. BATES AND CLYDE C. HARVEY (BATESIAN MODEL), IS USED TO DESCRIBE THE MUTUAL RESPONSIVENESS OF FAMILY BEHAVIOR TO CULTURE, PERSONALITY, INTERACTION, AND SITUATION. CHARACTERISTICS OF A ROLE IN THE BATESIAN MODEL ARE: (1) BEHAVIOR PERFORMED BY ONE ACTOR; (2) INTERACTION WITH ANOTHER ACTOR OR WITH A UNIT SUCH AS THE FAMILY; (3) ACTS ORGANIZED AROUND THE PERFORMANCE OF A FUNCTION; AND (4) OCCURRENCE WITHIN A PHYSICAL SETTING. HUMAN ENERGY AND NATURAL ENERGY RESOURCES ARE IMPORTANT FACTORS IN MANY PHASES OF FAMILY LIFE. FOR EXAMPLE, FAMILIES EXPORT ENERGY OUTPUTS TO OTHER PARTS OF SOCIETY BY WORKING AND ATTENDING SCHOOL; IMPORT ENERGY BY HIRING WORKMEN WITHIN THE HOME; AND RELEASE NONHUMAN ENERGY WASTE FLOWS SUCH AS CARBON DIOXIDE, HEAT, AND WASTE MATTER. FAMILIES ALSO EXPORT AND IMPORT INFORMATION WHEN FAMILY MEMBERS INTERACT AND EXCHANGE INFORMATION WITH SOCIAL GROUPS AND ORGANIZATIONS OTHER THAN THE NUCLEAR FAMILY. TWENTY-THREE HYPOTHESES GENERATED BY THE BATESIAN MODEL OF FAMILY AND ENERGY INFORMATION CONCLUDE THE PAPER. (AUTHOR/DB)

ACCESSION NUMBER: ED141217

CLEARINGHOUSE ACCESSION NUMBER: SO010053

PUBLICATION DATE: 77

TITLE: IMPLEMENTING ENERGY EDUCATION IN FLORIDA'S HIGH SCHOOLS: A TWO-WEEK CREDIT INSTITUTE FOR TEACHERS IN SOUTH FLORIDA. FINAL REPORT, VOLUME 1.

INSTITUTION CODE: BB813810

SPONSORING AGENCY CODE: BB813553

DESCRIPTOR: *CURRICULUM DEVELOPMENT; *ENERGY; ENERGY CONSERVATION; *ENVIRONMENTAL EDUCATION; ENVIRONMENTAL INFLUENCES; *INSERVICE TEACHER EDUCATION; INSTITUTES (TRAINING PROGRAMS); INTERDISCIPLINARY APPROACH; LEARNING ACTIVITIES; PROFESSIONAL TRAINING; SECONDARY EDUCATION; SKILL DEVELOPMENT; TEACHER IMPROVEMENT; TEACHER WORKSHOPS; TEACHING SKILLS; *TEACHING TECHNIQUES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$3.50 PLUS POSTAGE.

DESCRIPTIVE NOTE: 52P.

ISSUE: RIENOV77

ABSTRACT: A 1977 INSERVICE TEACHER TRAINING WORKSHOP IN IMPLEMENTING ENERGY EDUCATION IN FLORIDA HIGH SCHOOLS IS DESCRIBED. DESIGNED FOR SECONDARY TEACHERS OF SCIENCE, SOCIAL STUDIES, VOCATIONAL EDUCATION, ENVIRONMENTAL STUDIES, AND HOME ECONOMICS, THE TWO-WEEK WORKSHOP PROVIDED SPECIFIC CONTENT INSTRUCTION AND TEACHING METHODS RELATED TO ENERGY AND ENERGY CONSERVATION. THIRTY-FIVE TEACHERS WERE GIVEN AN OVERVIEW OF ENERGY, ENVIRONMENT, ECONOMICS, AND ETHICS THROUGH INVESTIGATION OF TOPICS SUCH AS NUCLEAR POWER, ALTERNATIVE ENERGY SOURCES, BIOLOGICAL ENERGY SYSTEMS, AND ELECTRICAL POWER GENERATION. SPEAKERS INCLUDED ENVIRONMENTAL EXPERTS FROM STATE AND LOCAL GOVERNMENT, UNIVERSITIES, PRIVATE INDUSTRY, AND CITIZENS' ORGANIZATIONS. PARTICIPANTS WERE INTRODUCED TO CURRICULUM MODELS AND GIVEN THE OPPORTUNITY TO DEVELOP THEIR OWN ENERGY EDUCATION UNITS. IT WAS RECOMMENDED THAT FUTURE INSTITUTES INCLUDE MORE EQUAL REPRESENTATION OF TEACHERS FROM ALL TARGET DISCIPLINES; INCREASED URBAN PARTICIPATION; FLEXIBILITY OF WORKSHOP SCHEDULES; AND AN ADVANCE MAILING OF READINGS TO EACH PARTICIPANT. THE DOCUMENT INCLUDES A LIST OF PARTICIPANTS, A DAILY SCHEDULE OF ACTIVITIES, A MEDIA AND MATERIALS LIST, AND EVALUATION FORMS. (AUTHOR/DB)

INSTITUTION NAME: FLORIDA STATE UNIV., TALLAHASSEE. ENVIRONMENTAL EDUCATION PROJECT.

SPONSORING AGENCY NAME: ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION, WASHINGTON, D.C.

ACCESSION NUMBER: ED141259

CLEARINGHOUSE ACCESSION NUMBER: SO010149

PUBLICATION DATE: 77

TITLE: TITLE I, HEA FINAL PROJECT REPORT. IDENTIFYING ENVIRONMENTAL EDUCATION NEEDS AND POST-SECONDARY EDUCATIONAL RESOURCES: A FLORIDA-WIDE COOPERATIVE NETWORK AND ENVIRONMENTAL/ENERGY EDUCATION NEEDS ASSESSMENT WORKSHOP, CONFERENCE REPORT AND A DIRECTORY OF FLORIDA'S POST SECONDARY ENVIRONMENTAL EDUCATION PROJECTS.

INSTITUTION CODE: BBB13810

DESCRIPTOR: DIRECTORIES; ELEMENTARY SECONDARY EDUCATION; *ENERGY CONSERVATION; *ENVIRONMENTAL EDUCATION; FEDERAL PROGRAMS; *GUIDELINES; HIGHER EDUCATION; INFORMATION NETWORKS; *NEEDS ASSESSMENT; POST SECONDARY EDUCATION; PROGRAM DESCRIPTIONS; PROGRAM DEVELOPMENT; PROGRAM PLANNING; STATE AGENCIES; STATE PROGRAMS; HIGHER EDUCATION ACT TITLE I

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$4.67 PLUS POSTAGE.

DESCRIPTIVE NOTE: 99P.

ISSUE: RIENOV77

ABSTRACT: THIS FINAL REPORT OUTLINES OBJECTIVES AND ACCOMPLISHMENTS OF THE ENVIRONMENTAL/ENERGY EDUCATION PROJECT IN FLORIDA. THE PROJECT WAS INITIATED TO: (1) IDENTIFY EXISTING ENVIRONMENTAL/ENERGY EDUCATION PROJECTS; (2) CONDUCT A NEEDS ASSESSMENT WORKSHOP; (3) DEVELOP RECOMMENDATIONS FOR THE IMPLEMENTATION OF ENVIRONMENTAL EDUCATION PROGRAMS; AND (4) ESTABLISH A NETWORK FOR THE EXCHANGE OF INFORMATION AND THE SHARING OF RESOURCES IN ENVIRONMENTAL EDUCATION. PROGRAM DIRECTORS WORKED WITH EDUCATORS AS WELL AS OFFICIALS OF PUBLIC AND PRIVATE AGENCIES CONCERNED WITH ENVIRONMENTAL EDUCATION. THE NEEDS ASSESSMENT WORKSHOP REPORT LISTS OBJECTIVES; NEEDS; IMPLEMENTATION STRATEGIES AND METHODS OF INFORMATION DISSEMINATION. ESSENTIALLY, NEEDS WERE DETERMINED RELATING TO THE NECESSITY OF MAN'S UNDERSTANDING HIS ENVIRONMENT. RECOMMENDATIONS STRESS THE IMPORTANCE OF THE TITLE I PROGRAM'S WORK WITH THE STATE. A DIRECTORY INVENTORIES POST-SECONDARY ENVIRONMENTAL EDUCATION RESOURCES IN FLORIDA. INFORMATION IS INCLUDED ON THE NAME OF THE RESOURCE FACILITY, ADDRESS, CONTACT PERSON, AND A DESCRIPTION OF THE NATURE OF THE CENTER. APPENDICES LIST NAMES AND ADDRESSES OF CONFERENCE PARTICIPANTS, COUNTY CONTACTS, AND ADVISORY BOARD COUNCIL MEMBERS. (RC)

INSTITUTION NAME: FLORIDA STATE UNIV., TALLAHASSEE. ENVIRONMENTAL EDUCATION PROJECT.

ACCESSION NUMBER: ED141944

CLEARINGHOUSE ACCESSION NUMBER: EA009757

PUBLICATION DATE: 77

TITLE: EMERGENCY ASSISTANCE FOR SCHOOLS ACT. HEARING BEFORE THE SUBCOMMITTEE ON ELEMENTARY, SECONDARY AND VOCATIONAL EDUCATION OF THE COMMITTEE ON EDUCATION AND LABOR, HOUSE OF REPRESENTATIVES, NINETY-FIFTH CONGRESS, FIRST SESSION ON H.R. 5996.

INSTITUTION CODE: BBB01024

DESCRIPTOR: *EDUCATIONAL FINANCE; *EDUCATIONAL LEGISLATION; ELEMENTARY SECONDARY EDUCATION; ENERGY; ENERGY CONSERVATION; *FEDERAL AID; FEDERAL GOVERNMENT; *FEDERAL LEGISLATION; *FUEL CONSUMPTION; *OPERATING EXPENSES; *EMERGENCY ASSISTANCE FOR SCHOOLS ACT

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 240P.; NOT AVAILABLE IN PAPER COPY DUE TO SMALL TYPE SIZE OF ORIGINAL DOCUMENT; PAGES 71-76 AND 190-196 MAY BE ILLEGIBLE; FOR RELATED DOCUMENTS, SEE EA 009 579-580

ISSUE: RIEDEC77

ABSTRACT: THIS PUBLICATION IS A COMPREHENSIVE RECORD OF TESTIMONY AND EXHIBITS PRESENTED TO THE SUBCOMMITTEE ON ELEMENTARY, SECONDARY, AND VOCATIONAL EDUCATION OF THE U.S. HOUSE OF REPRESENTATIVES DURING A HEARING ON H.R. 5996, A BILL TO PROVIDE EMERGENCY FEDERAL AID TO LOCAL EDUCATIONAL AGENCIES IN ORDER TO MEET THE RAPIDLY INCREASING COST OF FUEL. INCLUDED ARE THE TESTIMONY AND EXHIBITS OF 20 INDIVIDUALS, INCLUDING AN ARCHITECT, A MECHANICAL CONTRACTOR, A PROFESSIONAL ENGINEER, REPRESENTATIVES OF VARIOUS EDUCATIONAL ORGANIZATIONS, AND REPRESENTATIVES FROM THE U.S. COMMERCE DEPARTMENT, THE FEDERAL ENERGY ADMINISTRATION, AND ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION. THE COMPLETE TEXT OF THE BILL IS ALSO INCLUDED. (JG)

INSTITUTION NAME: CONGRESS OF THE U.S., WASHINGTON, D.C. HOUSE COMMITTEE ON EDUCATION AND LABOR.

ACCESSION NUMBER: ED141955

CLEARINGHOUSE ACCESSION NUMBER: EA009803

PUBLICATION DATE: AUG 77

TITLE: THE PRINCIPAL AND ENERGY CONSERVATION.

PERSONAL AUTHOR: FREDRICKSON, JOHN H.

DESCRIPTOR: *ADMINISTRATOR RESPONSIBILITY; *BUILDING OPERATION; *CHANGE STRATEGIES; EFFICIENCY; ELEMENTARY SECONDARY EDUCATION; *ENERGY CONSERVATION; FUEL CONSUMPTION; MECHANICAL EQUIPMENT; METHODS; *PRINCIPALS; SCHOOL MAINTENANCE

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$1.67 PLUS POSTAGE.

DESCRIPTIVE NOTE: 9P.

ISSUE: RIEDEC77

ABSTRACT: SCHOOLS CAN ACHIEVE SIGNIFICANT ENERGY SAVINGS IN A SURPRISING NUMBER OF WAYS. SOME OF THESE METHODS HAVE TO DO WITH INSPECTING AND UPGRADING FACILITIES REGULARLY, AND SOME WITH SETTING AND SERVICING EQUIPMENT PROPERLY. BUT OTHERS DEPEND ON CHANGING THE WASTEFUL HABITS THAT ARE THE PRODUCTS OF A TIME WHEN BOTH ENERGY AND MONEY WERE MORE PLENTIFUL. PRINCIPALS, THEREFORE, MUST TAKE THE LEAD BOTH BY DIRECTING AND PARTICIPATING IN SERIOUS ENERGY CONSERVATION STRATEGIES. (AUTHOR)

ACCESSION NUMBER: ED142135

CLEARINGHOUSE ACCESSION NUMBER: HE009125

PUBLICATION DATE: APR 77

TITLE: ENERGY COSTS AND ENERGY CONSERVATION PROGRAMS IN COLLEGES AND UNIVERSITIES: 1972-73, 1974-75. HIGHER EDUCATION PANEL REPORTS, NUMBER 31.

PERSONAL AUTHOR: ATELSEK, FRANK J.; GOMBERG, IRENE L.

INSTITUTION CODE: BBB07298

DESCRIPTOR: ADMINISTRATIVE POLICY; *COLLEGES; EDUCATIONAL COMPLEXES; *EDUCATIONAL FACILITIES; *ENERGY CONSERVATION; *FUEL CONSUMPTION; FUELS; HIGHER EDUCATION; NATIONAL SURVEYS; SCHOOL BUILDINGS; STATISTICAL DATA; STATISTICAL STUDIES; TABLES (DATA); *UNIVERSITIES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$4.67 PLUS POSTAGE.

DESCRIPTIVE NOTE: 76P.

ISSUE: RIEDEC77

ABSTRACT: A SURVEY WAS INITIATED AT THE REQUEST OF THE U.S. OFFICE OF EDUCATION AND THE ENERGY TASK FORCE TO: (1) MEASURE THE INCREASE IN ENERGY EXPENDITURES SINCE THE OPEC OIL EMBARGO OF 1973-74; (2) ASSESS CHANGES IN ENERGY CONSUMPTION OVER A TWO-YEAR PERIOD; AND (3) EXAMINE SOME OF THE SPECIFIC CONSERVATION PRACTICES OF HIGHER EDUCATION INSTITUTIONS. EACH COLLEGE RESPONDENT WAS ASKED TO INDICATE, FOR EACH OF THE TWO SURVEY YEARS: (1) THE AMOUNT OF EACH TYPE OF FUEL CONSUMED AND THE TOTAL COST; (2) THE INSTITUTION'S INVOLVEMENT IN THREE STAGES OF ENERGY CONSERVATION; AND (3) SELECTED INSTITUTIONAL EXPERIENCES DURING THE PERIOD OF THE OIL EMBARGO. RESPONDENTS WERE ASKED TO REPORT ONLY THE AMOUNTS OF FUEL USED TO MAINTAIN BUILDINGS AND FACILITIES, AND TO EXCLUDE TRANSPORTATION FUEL NEEDS. THE RESULTS ARE PRESENTED IN DETAILED STATISTICAL TABLES AND ANALYZED IN THE AGGREGATE. (AUTHOR/RSE)

AVAILABILITY: HIGHER EDUCATION PANEL, AMERICAN COUNCIL ON EDUCATION, ONE DUPONT CIRCLE, WASHINGTON, D.C. 20036

INSTITUTION NAME: AMERICAN COUNCIL ON EDUCATION, WASHINGTON, D.C. HIGHER EDUCATION PANEL.

ACCESSION NUMBER: ED142232

CLEARINGHOUSE ACCESSION NUMBER: IR005096

PUBLICATION DATE: 76

TITLE: ANNOTATED BIBLIOGRAPHY ON HOUSING AND SETTLEMENTS FOR LOW INCOME PEOPLE.

INSTITUTION CODE: BBB03531

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; BUILDING MATERIALS; CLIMATIC FACTORS; COMMUNITY DEVELOPMENT; CONSTRUCTION MANAGEMENT; DEMOGRAPHY; ECONOMIC FACTORS; ENERGY; HEALTH CONDITIONS; *HOUSING; *LOW INCOME; SANITARY FACILITIES; TRANSPORTATION

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$2.06 PLUS POSTAGE.

DESCRIPTIVE NOTE: 47P.

ISSUE: RIEDEC77

ABSTRACT: BETWEEN MAY 29 AND JUNE 12, 1976, THE PARTICIPANTS OF THE *TRIAD OPERATIONS WORKSHOP: TRAINING OF DOCUMENTATION SPECIALISTS FOR LOW-COST HOUSING TECHNOLOGY PROGRAMS* ATTENDED THE HABITAT FORUM AT VANCOUVER, CANADA.

DURING THAT PERIOD THEY HAD COLLECTED A NUMBER OF DOCUMENTS FROM THE VARIOUS ORGANIZATIONS AND INSTITUTES THAT TOOK PART IN THE FORUM. THIS ANNOTATED BIBLIOGRAPHY HAS BEEN MADE AS AN ATTEMPT TO DISSEMINATE THE INFORMATION ACQUIRED, AND TO COMPLEMENT A RECENTLY PUBLISHED "PROVISIONAL ANNOTATED BIBLIOGRAPHY ON LOW COST HOUSING AND RELATED TOPICS" PREPARED BY THE EAST-WEST TECHNOLOGY AND DEVELOPMENT INSTITUTE. BOTH BIBLIOGRAPHIES ARE DESIGNED TO BECOME THE STEPPING STONE FOR A CONTINUOUS UNDERTAKING OF UPDATING ALL INFORMATION RELEVANT TO THE SUBJECT MATTER. COUNTRIES REPRESENTED AT THE WORKSHOP WERE: INDONESIA; INDIA; KOREA; PAKISTAN; PHILIPPINES; THAILAND; AUSTRALIA; AND THE UNITED STATES. (AUTHOR/AP)

INSTITUTION NAME: HAWAII UNIV., HONOLULU. EAST-WEST CENTER.

ACCESSION NUMBER: ED142391

CLEARINGHOUSE ACCESSION NUMBER: SE022540

PUBLICATION DATE: APR 77

TITLE: BIOLOGICAL SCIENCES CURRICULUM STUDY NEWSLETTER, NO. 67, A NEW BSCS PROGRAM: ENERGY AND SOCIETY.

PERSONAL AUTHOR: CLARK, GEORGE M., ED.

INSTITUTION CODE: DUN06181

DESCRIPTOR: BIOLOGICAL SCIENCES; CURRICULUM; *ENERGY; *ENVIRONMENTAL EDUCATION; *EVALUATION; *INSTRUCTIONAL MATERIALS; SCIENCE EDUCATION; SCIENCE UNITS; SECONDARY EDUCATION; *SECONDARY SCHOOL SCIENCE; *BIOLOGICAL SCIENCES CURRICULUM STUDY

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 29P.

ISSUE: RIEDEC77

ABSTRACT: THIS DOCUMENT PROVIDES A REVIEW OF THE NINE-WEEK, SECONDARY OR COLLEGE LEVEL BIOLOGICAL SCIENCES CURRICULUM STUDY (BSCS) UNIT ENTITLED "ENERGY AND SOCIETY: INVESTIGATIONS IN DECISION MAKING." INCLUDED IS A REPRINT OF THE UNIT'S LAST CHAPTER WHICH PRESENTS POSSIBLE SCENARIOS FOR FUTURE INVESTIGATIONS AND A REPORT OF EVALUATIONS MADE OF THE UNIT THROUGHOUT ITS DEVELOPMENT. THE NEWSLETTER ALSO INCLUDES AN ARTICLE ON SCIENCE HISTORY RELATING TO THE DEVELOPMENT OF EVOLUTION THEORY. (SL)

AVAILABILITY: BIOLOGICAL SCIENCES CURRICULUM STUDY, P.O. BOX 930, BOULDER, COLORADO 80306 (FREE)

INSTITUTION NAME: BIOLOGICAL SCIENCES CURRICULUM STUDY, BOULDER, COLO.

ACCESSION NUMBER: ED142422

CLEARINGHOUSE ACCESSION NUMBER: SE022749

PUBLICATION DATE: FEB 77

TITLE: MOUNTING PRESSURES ON PLANET EARTH. A FOUR-PART BICENTENNIAL SYMPOSIUM SERIES.

PERSONAL AUTHOR: ANDERTON, DAVID A., ED.

SPONSORING AGENCY CODE: BB803687; LYR45900

DESCRIPTOR: CONFERENCES; ENERGY; FOOD; *FUTURES (OF SOCIETY); *NATURAL RESOURCES; SCIENCES; *SYMPOSIA; *TECHNOLOGY; *VALUES; *WORLD PROBLEMS

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$3.50 PLUS POSTAGE.

DESCRIPTIVE NOTE: 74P.; PHOTOGRAPHS MAY NOT REPRODUCE WELL

ISSUE: RIEDEC77

ABSTRACT: DETAILED ARE THE PROCEEDINGS OF THE 1976 BICENTENNIAL SYMPOSIUM SERIES HELD UNDER THE GENERAL TITLE OF MOUNTING PRESSURES ON PLANET EARTH. THIS EVENT, CO-SPONSORED BY THE MARYLAND STATE DEPARTMENT OF EDUCATION AND THE NASA GODDARD SPACE FLIGHT CENTER, BROUGHT TOGETHER RESEARCHERS AND EDUCATORS TO DISCUSS SOLUTIONS TO THE EARTH'S PROBLEMS. THE SYMPOSIUM WAS BROKEN INTO FOUR SESSIONS; EACH SESSION TOOK A DETAILED LOOK AT A VERY FUNDAMENTAL QUESTION ABOUT THE EARTH'S FUTURE. THE QUESTIONS INVESTIGATED WERE: CAN THE EARTH FEED ITS PEOPLE (FORUM I); CAN THE EARTH PROVIDE THE ENERGY AND OTHER RESOURCES FOR THE NEXT GENERATION (FORUM II); CAN SCIENCE AND TECHNOLOGY SOLVE THE EARTH'S PROBLEMS (FORUM III); AND CAN EXISTING ECONOMIC, POLITICAL, AND VALUE SYSTEMS COPE WITH THE PROBLEMS OF THE EARTH (FORUM IV)? AN AFTERWORD BY THE EDITOR CONCLUDES THIS PUBLICATION. (BT)

SPONSORING AGENCY NAME: MARYLAND STATE DEPT. OF EDUCATION, BALTIMORE.; NATIONAL AERONAUTICS AND SPACE ADMINISTRATION, NEW YORK, N. Y. GODDARD INST. FOR SPACE STUDIES.

ACCESSION NUMBER: ED142423

CLEARINGHOUSE ACCESSION NUMBER: SE022755

PUBLICATION DATE: MAR 76

TITLE: ECP (ENVIRONMENTAL CONSERVATION PROJECT) REPORT, NO. 5, MARCH 1976. PLANNING FOR ENERGY CONSERVATION.

INSTITUTION CODE: BB814723

DESCRIPTOR: CRIME; DECISION MAKING; *ENERGY CONSERVATION; *ENVIRONMENT; *GUIDELINES; *LAND USE; *PLANNING; RECYCLING; STATEWIDE PLANNING; TRANSPORTATION

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 21P.; FOR RELATED DOCUMENT, SEE SE 022 756; NOT AVAILABLE IN HARD COPY DUE TO COPYRIGHT RESTRICTIONS

ISSUE: RIEDEC77

ABSTRACT: THE CULMINATION OF THE ENVIRONMENTAL LAW INSTITUTE'S ENERGY CONSERVATION PROJECT WILL BE A SERIES OF HANDBOOKS ADDRESSED TO STATE AND LOCAL OFFICIALS, LEGISLATORS, AND INTERESTED CITIZENS SETTING OUT SUGGESTED STRATEGIES FOR CONSERVING ENERGY. THIS ISSUE OF THE ECP REPORT PUBLISHES THE FIRST OF A SERIES OF DRAFT CHAPTERS FROM THESE HANDBOOKS - A CHAPTER ON LAND USE PLANNING FOR ENERGY CONSERVATION BY CORBIN CREWS HARWOOD FROM HER BOOK, LAND USE AND ENERGY CONSERVATION. THIS CHAPTER DESCRIBES HOW PLANS DESIGNED TO PROMOTE ENERGY-EFFICIENT LAND USE CAN BE ESTABLISHED AT THE STATE, REGIONAL, AND LOCAL LEVELS; AND, BRIEFLY OUTLINES GUIDELINES FOR DRAFTING ENERGY-EFFICIENT COMPREHENSIVE PLANS. SPECIFIC ENERGY-SAVING STRATEGIES ARE DISCUSSED IN THE CONTEXT OF COMPREHENSIVE PLANNING. INCLUDED IN THE APPENDIX ARE: EXCERPTS FROM THE ENERGY CONSERVATION AND TRANSPORTATION GOALS AND POLICIES ADOPTED BY THE LINCOLN, NEBRASKA, CITY COUNCIL AND THE LANCASTER COUNTY, NEBRASKA, BOARD OF COMMISSIONERS; THE FINAL GUIDELINES ISSUED BY THE FEDERAL ENERGY ADMINISTRATION FOR THE PREPARATION OF STATE ENERGY CONSERVATION FEASIBILITY REPORTS; A REVIEW OF THE FEDERAL GOVERNMENT'S PROBLEMS AND PROSPECTS RELATED TO THE PROCUREMENT OF RECYCLED GOODS; AND AN ARTICLE DESCRIBING ENERGY CONSERVATION THROUGH THE LOWERING OF TRANSIT CRIME. (BT)

INSTITUTION NAME: ENVIRONMENTAL LAW INST., WASHINGTON, D.C.

ACCESSION NUMBER: ED142424

CLEARINGHOUSE ACCESSION NUMBER: SE022756

PUBLICATION DATE: DEC 76

TITLE: ECP (ENVIRONMENTAL CONSERVATION PROJECT) REPORT, NO. 8, DECEMBER 1976. ECP STATE BIBLIOGRAPHY.

PERSONAL AUTHOR: DEAN, NORMAN L., ED.

INSTITUTION CODE: BB814723

SPONSORING AGENCY CODE: PGK57495

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; *BIBLIOGRAPHIES; *ENERGY; ENERGY CONSERVATION; ENVIRONMENT; GOVERNMENT (ADMINISTRATIVE BODY); *LAWS; LEGISLATION; STATE GOVERNMENT; *STATE LEGISLATION

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 29P.; FOR RELATED DOCUMENT, SEE SE 022 755; NOT AVAILABLE IN HARD COPY DUE TO COPYRIGHT RESTRICTIONS

ISSUE: RIEDEC77

ABSTRACT: THIS ISSUE OF THE ENVIRONMENTAL CONSERVATION PROJECT (ECP) REPORT CONTAINS THE SECOND SUPPLEMENT TO THE "ECP STATE BIBLIOGRAPHY," A COLLECTION OF STATE ENERGY LEGISLATION COMPILED BY THE ENERGY CONSERVATION PROJECT AT THE ENVIRONMENTAL LAW INSTITUTE. EARLIER PUBLICATIONS OF STATE LEGISLATIVE ACTIONS APPEAR IN THE OCTOBER 1975 AND JANUARY 1976 ISSUES. THE BIBLIOGRAPHY IS COMPLETE THROUGH THE 1975 LEGISLATIVE SESSIONS, WITH 1976 DATA PROVIDED FOR SOME STATES. ALL ENACTED LEGISLATION IS LISTED FIRST, FOLLOWED BY BILLS AND OTHER RELEVANT STATE MATERIALS. CORRECTIONS, ADDITIONS, OR UPDATES TO THE STATUS OF BILLS LISTED IN PREVIOUS ISSUES ARE PROVIDED. (BT)

AVAILABILITY: ENERGY CONSERVATION PROJECT, ENVIRONMENTAL LAW INSTITUTE, 1346 CONNECTICUT AVENUE, N.W., SUITE 620, WASHINGTON, D.C. 20036 (FREE)

INSTITUTION NAME: ENVIRONMENTAL LAW INST., WASHINGTON, D.C.

SPONSORING AGENCY NAME: NATIONAL SCIENCE FOUNDATION, WASHINGTON, D.C.

ACCESSION NUMBER: ED142794

CLEARINGHOUSE ACCESSION NUMBER: CE011948

PROGRAM AREA: 08

PUBLICATION DATE: 1 JUL 77

TITLE: ENERGY PROBLEMS PROVIDE JOB OPPORTUNITIES.

PERSONAL AUTHOR: MOORE, ALLEN B.

INSTITUTION CODE: BB812937

SPONSORING AGENCY CODE: BB809463

DESCRIPTOR: DEMAND OCCUPATIONS; DEPLETED RESOURCES; *EMPLOYMENT OPPORTUNITIES; *EMPLOYMENT PROJECTIONS; *ENERGY CONSERVATION; LITERATURE REVIEWS; NATURAL RESOURCES; *VOCATIONAL EDUCATION

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$1.67 PLUS POSTAGE.

DESCRIPTIVE NOTE: 15P.

ISSUE: RIEJAN78

ABSTRACT: IN RESPONSE TO THE PROBLEMS CREATED BY A DIMINISHING ENERGY SUPPLY BUT AN INCREASING ENERGY DEMAND, THIS SECOND IN A SERIES OF NATIONAL REPORTS STUDIES THE LINKAGE OF VOCATIONAL EDUCATION AND ENERGY. THROUGH AN EXAMINATION OF SELECTED LITERATURE WITH REFERENCE TO TYPES OF ENERGY RESOURCES, THE AUTHOR IDENTIFIES THE EMERGING OCCUPATIONS RELATED TO THE DEVELOPMENT OF ALTERNATIVE ENERGY SOURCES AND CONSIDERS THE RELEVANCE OF THESE OCCUPATIONS TO VOCATIONAL EDUCATION. (BM)

INSTITUTION NAME: OHIO STATE UNIV., COLUMBUS. CENTER FOR VOCATIONAL EDUCATION.

SPONSORING AGENCY NAME: BUREAU OF OCCUPATIONAL AND ADULT EDUCATION (DHEW/OE), WASHINGTON, D.C.

ACCESSION NUMBER: ED143296

CLEARINGHOUSE ACCESSION NUMBER: HE009246

PUBLICATION DATE: DEC 76

TITLE: ENERGY CONSERVATION ON CAMPUS. VOLUME II: CASE STUDIES.

INSTITUTION CODE: 88812650

DESCRIPTOR: *BUILDING OPERATION; *CASE STUDIES; *COST EFFECTIVENESS; EDUCATIONAL ECONOMICS; *ENERGY CONSERVATION; EXPENDITURES; *FUEL CONSUMPTION; HIGHER EDUCATION; MANAGEMENT; *OPERATING EXPENSES; PRIVATE COLLEGES; STATE COLLEGES; STATE UNIVERSITIES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$2.06 PLUS POSTAGE.

DESCRIPTIVE NOTE: 349P.

ISSUE: RIEJAN78

ABSTRACT: CASE STUDIES ARE REPORTED FROM 19 DIVERSE INSTITUTIONS THAT, IN SPITE OF DESIGN LIMITATIONS, IMPLEMENTED INITIAL CONSERVATION PROGRAMS THAT SAVED 15 TO 25 PERCENT OF THE ENERGY PREVIOUSLY USED. REPORTING INSTITUTIONS CONTINUED TO REDUCE ENERGY CONSUMPTION THROUGH THE DEVELOPMENT OF AN ENERGY MANAGEMENT PROGRAM. FOCUS IN THIS REPORT IS ON COST AVOIDANCE RATHER THAN COST SAVINGS, SINCE CONSERVATION EFFORTS ARE NOT LIKELY TO BE REWARDED BY A REAL REDUCTION IN CURRENT FUEL EXPENDITURES. THE INSTITUTIONS REPORTING ARE: UNIVERSITY OF IOWA; KENT STATE UNIVERSITY; UNIVERSITY OF MISSISSIPPI; UNIVERSITY OF MISSOURI; NORTH CAROLINA STATE UNIVERSITY; OHIO STATE UNIVERSITY; SOUTH DAKOTA STATE SYSTEM; UNIVERSITY OF TEXAS AT AUSTIN; UNIVERSITY OF WASHINGTON; BRADLEY UNIVERSITY; CLARKSON COLLEGE OF TECHNOLOGY; CORNELL UNIVERSITY; LAFAYETTE COLLEGE; MASSACHUSETTS INSTITUTE OF TECHNOLOGY; PRINCETON UNIVERSITY; YALE UNIVERSITY; ST. LOUIS JUNIOR COLLEGE DISTRICT; ST. PETERSBURG JUNIOR COLLEGE; AND CARLETON UNIVERSITY IN OTTAWA. (LBM)

REPORT NUMBER: FEA-D-76-230

CONTRACT NUMBER: CO-04-50247-00

AVAILABILITY: SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON, D.C. 20402 (STOCK NO. 041-018-00126-3, $1.00)

INSTITUTION NAME: FEDERAL ENERGY ADMINISTRATION, WASHINGTON, D.C.

ACCESSION NUMBER: ED143400

CLEARINGHOUSE ACCESSION NUMBER: JC770424

PUBLICATION DATE: JUL 77

TITLE: ENERGY CONSERVATION RESEARCH STUDY. FINAL REPORT.

PERSONAL AUTHOR: CAVENBERG, MERLIN; AND OTHERS

INSTITUTION CODE: 88812653

SPONSORING AGENCY CODE: ZOU97865

DESCRIPTOR: BUSINESS; COMMUNITY COLLEGES; *CONSERVATION EDUCATION; EDUCATIONAL RESEARCH; *ENERGY CONSERVATION; ENVIRONMENTAL EDUCATION; ENVIRONMENTAL TECHNICIANS; INDUSTRY; *JUNIOR COLLEGES; MANPOWER NEEDS; NATIONAL SURVEYS; *PROGRAM DESCRIPTIONS; PROGRAM PLANNING; QUESTIONNAIRES; TECHNICAL EDUCATION; *VOCATIONAL EDUCATION

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$3.50 PLUS POSTAGE.

DESCRIPTIVE NOTE: 53P.

ISSUE: RIEJAN78

ABSTRACT: THIS STUDY EXPLORED THE AVAILABILITY OF ENERGY CONSERVATION PROGRAMS AT COMMUNITY COLLEGES. THE APPARENT NEED FOR SUCH PROGRAMS OR COURSES BY INDUSTRY, BUSINESS, AND GOVERNMENT; AND THE TYPES OF PROGRAMS, IF ANY, WHICH SHOULD BE OFFERED AT THE VOCATIONAL/TECHNICAL LEVEL. INFORMATION WAS SOUGHT FROM 52 CURRENT TWO-YEAR PROGRAMS, THE FIFTY STATE DEPARTMENTS OF PUBLIC INSTRUCTION, SEVERAL FEDERAL AGENCIES, 200 INDUSTRIES NATIONWIDE, AND 274 INDIVIDUALS. IDEAS AND PROGRAMS WERE FOUND TO BE CONCENTRATED IN FOUR AREAS OF ENERGY CONSERVATION INSTRUCTION: (1) TECHNICIAN PROGRAMS; (2) COURSES; (3) SEMINARS AND WORKSHOPS; AND (4) THE INCORPORATION OF ENERGY CONSERVATION INTO EXISTING PROGRAMS. OF THESE FOUR, ONLY THE TECHNICIAN PROGRAM DID NOT APPEAR FEASIBLE SINCE THERE ARE NO APPARENT JOB OPPORTUNITIES AT THE TECHNICIAN LEVEL. THE DOCUMENT DETAILS SIGNIFICANT RESPONSES FROM INDIVIDUALS, DESCRIBES PROGRAMS NOW IN EFFECT IN SPECIFIC COLLEGES, AND SUMMARIZES RESPONSES FROM STATE DEPARTMENTS AND OIL AND UTILITY COMPANIES. QUESTION ITEM STATISTICS ARE PRESENTED FOR THE INDUSTRIAL SURVEY, SHOWING THE CURRENT AND PLANNED INDUSTRIAL CONSERVATION PROGRAMS. LETTERS USED IN THE STUDY AND THE INDUSTRIAL QUESTIONNAIRE ARE APPENDED. (AT)

GRANT NUMBER: 08-144-151-227

INSTITUTION NAME: GATEWAY TECHNICAL INST., KENOSHA, WIS.

SPONSORING AGENCY NAME: WISCONSIN STATE BOARD OF VOCATIONAL, TECHNICAL, AND ADULT EDUCATION, MADISON.

ACCESSION NUMBER: ED143393

CLEARINGHOUSE ACCESSION NUMBER: SU010269

PUBLICATION DATE: SEP 77

TITLE: ENERGY AND THE ENVIRONMENT. FINAL REPORT, VOLUME II.

PERSONAL AUTHOR: LAMART, DAVID E., ED.; ALLEN, ROONEY F., ED.

INSTITUTION CODE: 88807081

SPONSORING AGENCY CODE: 88813553

DESCRIPTOR: *ACTIVITY UNITS; CONSERVATION EDUCATION; EARTH SCIENCE; *ENERGY; *ENERGY CONSERVATION; *ENVIRONMENTAL EDUCATION; GEOGRAPHY; INTERDISCIPLINARY APPROACH; MATHEMATICS INSTRUCTION; READING INSTRUCTION; SCIENCES; SECONDARY EDUCATION; SOCIAL STUDIES; SPELLING INSTRUCTION; *TEACHER DEVELOPED MATERIALS

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$6.01 PLUS POSTAGE.

DESCRIPTIVE NOTE: 106P.; FOR RELATED DOCUMENTS, SEE ED 149 677 AND SO 010 053

ISSUE: RIEJAN78

ABSTRACT: THESE SELF-CONTAINED ENERGY UNITS WERE DEVELOPED BY FLORIDA TEACHERS TO HELP HIGH SCHOOL STUDENTS BETTER UNDERSTAND ENERGY, ENERGY CONSERVATION, AND LIFE-STYLES. THE MAJOR OBJECTIVES ARE TO HELP STUDENTS UNDERSTAND THE SCIENCE AND TECHNOLOGY OF ENERGY, MAKE INFORMED AND FAIR JUDGMENTS ON ENERGY OPTIONS, MAKE PERSONAL LIFE-STYLE COMMITMENTS WHICH ARE MORALLY RESPONSIBLE, AND PREPARE FOR PARTICIPATION OPPORTUNITIES IN SETTING ENERGY POLICY. THE UNITS CONTAIN EASY TO IMPLEMENT STUDENT ACTIVITIES WHICH DEAL WITH CONSERVATION, FOSSIL SOURCES OF ENERGY, GENERATING ELECTRIC POWER, AND LIFE-STYLES. TEACHERS CAN INTEGRATE THE ACTIVITIES INTO MANY SUBJECT AREAS INCLUDING SOCIAL STUDIES, SCIENCE, EARTH SCIENCE, GEOGRAPHY, READING, MATHEMATICS, AND SPELLING. THE ACTIVITIES ARE VARIED AND INVOLVE STUDENTS IN CLASSROOM DISCUSSIONS, MAKING COLLAGES, WRITING PAMPHLETS ON WAYS TO CONSERVE ENERGY, DRAWING CARTOONS, DOING MATHEMATICS EXERCISES, CONSTRUCTING A MODEL NUCLEAR POWER STATION, AND DOING SCIENTIFIC EXPERIMENTS. FOR VOLUME I, SEE ED 149 677. (AUTHOR/RM)

INSTITUTION NAME: FLORIDA STATE UNIV., TALLAHASSEE. COLL. OF EDUCATION.

SPONSORING AGENCY NAME: ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION, WASHINGTON, D.C.

ACCESSION NUMBER: ED144240

CLEARINGHOUSE ACCESSION NUMBER: EA009951

PUBLICATION DATE: SEP 77

TITLE: ENERGY CONSERVATION.

INSTITUTION CODE: 88803191

DESCRIPTOR: *BOARD OF EDUCATION POLICY; BOARDS OF EDUCATION; BUILDING OPERATION; ELEMENTARY SECONDARY EDUCATION; *ENERGY CONSERVATION; EQUIPMENT MAINTENANCE; EXPENDITURE PER STUDENT; *GUIDELINES; HEAT RECOVERY; ILLUMINATION LEVELS; QUESTIONNAIRES; RECORDKEEPING; SCHOOL MAINTENANCE; SCHOOL PERSONNEL; *SCHOOL SYSTEMS; STUDENT PARTICIPATION; THERMAL ENVIRONMENT; *CANADA

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 43P.; AVAILABLE IN ENGLISH OR FRENCH

ISSUE: RIEFEB78

ABSTRACT: A QUESTIONNAIRE DISTRIBUTED IN MARCH 1977 TO 71 CANADIAN SCHOOL SYSTEMS SOUGHT INFORMATION ON ANY ENERGY CONSERVATION PROGRAMS THAT THE SCHOOL BOARDS MIGHT HAVE UNDERTAKEN. BASED ON THE 43 REPLIES RECEIVED, A 60 PERCENT RESPONSE RATE, THE FINDINGS ARE REPORTED AND SOME SUGGESTIONS ARE OFFERED. THE FIRST SECTION ON ENERGY CONSERVATION AT THE BOARD LEVEL, INCLUDING POLICIES AND COSTS, REVEALS THAT ONLY 20 OF THE 43 RESPONDENTS HAVE OFFICIALLY DEVELOPED A PROGRAM. RESPONSES TO THE SECOND SECTION, ENERGY CONSERVATION IN THE SCHOOLS, INDICATE THAT 32 BOARDS USE ONE OR MORE ENERGY-SAVING MEASURES. SUBSTANTIAL SAVINGS WERE EFFECTED BY SIMPLE AND NO COST METHODS; MORE SUBSTANTIVE MEASURES INVOLVED IMPROVEMENT IN THE OPERATION AND MAINTENANCE OF EXISTING EQUIPMENT AND THE MODERNIZATION OF THE EXISTING BUILDINGS AND EQUIPMENT. THE FINAL SECTION SOUGHT INFORMATION ON THE IMPORTANCE GIVEN TO THE TOPIC OF ENERGY CONSERVATION IN COURSES, AND ON STAFF AND STUDENT CONTRIBUTION. FOURTEEN BOARDS OFFER COURSES WITH AN ENERGY CONTENT, USUALLY IN THE SCIENCES. EIGHT BOARDS CONTINUOUSLY UPGRADE THEIR CUSTODIAL STAFF THROUGH CLASSES AND SEMINARS, TWO OTHERS THROUGH UPGRADING CLASSES ONLY. (AUTHOR/MLF)

AVAILABILITY: THE CANADIAN EDUCATION ASSOCIATION, 252 BLOOR STREET WEST, SUITE S850, TORONTO, ONTARIO, CANADA M5S 1V5 ($2.00; PAYMENT SHOULD ACCOMPANY ORDER)

INSTITUTION NAME: CANADIAN EDUCATION ASSOCIATION, TORONTO (ONTARIO).

ACCESSION NUMBER: ED144249

CLEARINGHOUSE ACCESSION NUMBER: EA009964

PUBLICATION DATE: NOV 76

TITLE: ENERGY CONSERVATION IN BUILDINGS--A HUMAN FACTORS/SYSTEMS VIEWPOINT. NBS BUILDING SCIENCE SERIES 88.

PERSONAL AUTHOR: RUBIN, ARTHUR I.

INSTITUTION CODE: 88801696

DESCRIPTOR: *BUILDING DESIGN; BUILDING IMPROVEMENT; *CRITERIA; DESIGN NEEDS; *ENERGY CONSERVATION; ENVIRONMENTAL INFLUENCES; *FACILITY REQUIREMENTS; FLEXIBLE FACILITIES; *HUMAN ENGINEERING; MAINTENANCE; MAN MACHINE SYSTEMS; *SYSTEMS ANALYSIS

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$1.67 PLUS POSTAGE.

DESCRIPTIVE NOTE: 23P.

ISSUE: RIEFEB78

ABSTRACT: THE CURRENT EMPHASIS ON ENERGY CONSERVATION IN BUILDINGS MUST BE BALANCED BY A CAREFUL CONSIDERATION OF HOW PROPOSED APPROACHES AFFECT BUILDING OCCUPANTS. A HEADLONG

RUSH TOWARD BUILDING DESIGNS THAT CONSERVE ENERGY AT THE EXPENSE OF THE QUALITY OF BUILDINGS AS JUDGED BY OCCUPANTS WOULD BE A VERY SHORTSIGHTED APPROACH. THERE MUST BE A CONTINUAL AWARENESS AND SENSITIVITY OF THE CONSEQUENCES ON PEOPLE WHEN SELECTING AMONG ALTERNATIVE "TECHNICAL" OPTIONS DESIGNED AS A RESULT OF ENERGY CONSERVATION NEEDS. WE NEED AN INCREASING UNDERSTANDING OF SUCH FACTORS AS THERMAL COMFORT AND ILLUMINATION NEEDS IN BUILDINGS, AS DECISIONS LIKELY TO INFLUENCE THESE REQUIREMENTS ARE MADE BY DESIGNERS. ANOTHER AREA OF CONCERN WHICH SHOULD NOT BE OVERLOOKED IS THE INTERACTION OF PEOPLE WITH THEIR ENVIRONMENTS. APPROACHES TO ENERGY CONSERVATION PROBLEMS ARE OFTEN DEFEATED BY BUILDING OCCUPANTS. TIGHT SEALS AROUND DOORS AND WINDOWS ARE USELESS IF DOORS AND WINDOWS ARE KEPT OPEN, AND BUILDING OCCUPANTS HAVE NO CHOICE BUT TO TURN ALL OF THE LIGHTS ON OR OFF IF THESE ARE THE ONLY CONTROL OPTIONS AVAILABLE TO THEM. BUILDING MANAGERS, OPERATORS, AND OCCUPANTS HAVE AN IMPORTANT, THOUGH NOT WELL UNDERSTOOD, ROLE TO PLAY IN ANY ENERGY CONSERVATION PROGRAM. (AUTHOR)

AVAILABILITY: SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON, D.C. 20402 (STOCK NO. 003-003-01693-4; $0.65)

INSTITUTION NAME: NATIONAL BUREAU OF STANDARDS (DOC), WASHINGTON, D.C. INST. FOR APPLIED TECHNOLOGY.

ACCESSION NUMBER: ED144261

CLEARINGHOUSE ACCESSION NUMBER: EA009981

PUBLICATION DATE: 4 OCT 77

TITLE: ENERGY AND EDUCATION HANDBOOK.

PERSONAL AUTHOR: CAMPBELL, BRUCE, COMP.

INSTITUTION CODE: GAT59175

DESCRIPTOR: *CONSERVATION EDUCATION; *CURRICULUM GUIDES; *CURRICULUM PLANNING; DEPLETED RESOURCES; ELEMENTARY SECONDARY EDUCATION; *ENERGY CONSERVATION; *ENVIRONMENTAL EDUCATION; FUEL CONSUMPTION; FUELS; NEEDS ASSESSMENT; SCHOOL IMPROVEMENT; SOLAR RADIATION; *NEW JERSEY

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$10.03 PLUS POSTAGE.

DESCRIPTIVE NOTE: 204P.; FOR ISSUE AT THE ENERGY AND EDUCATION CONFERENCE FOR NEW JERSEY SCHOOL PERSONNEL (TWISUM, N.J., OCTOBER 4, 1977)

ISSUE: RIEFEB78

ABSTRACT: BACKGROUND PAPERS ARE SUPPLIED THAT OUTLINE THE ENERGY EDUCATION NEEDS FOR NEW JERSEY SCHOOLS AND SHOW THE DIMENSIONS OF THE ENERGY CRISIS IN TERMS OF THE AVAILABILITY OF FUEL SOURCES. A CURRICULUM MODEL FOR INTRODUCTION TO ENERGY AND ENERGY CONSERVATION IS SUPPLIED WITH BACKGROUND INFORMATION WRITTEN FOR ALL TEACHERS FROM KINDERGARTEN THROUGH SECONDARY SCHOOL. FOUR TEACHING UNITS PROVIDE FOR THE DIFFERENTIATION OF INSTRUCTION: KINDERGARTEN-PRIMARY; UPPER ELEMENTARY, MIDDLE SCHOOL, AND HIGH SCHOOL LEVEL. A GLOSSARY AND AN EXTENSIVE BIBLIOGRAPHY COMPLETE THE MODEL. THE MAJOR GOAL OF THE PUBLICATION IS TO GIVE THE TEACHER ORIENTATION TO ENERGY EDUCATION AND THE ENCOURAGEMENT TO DO RESEARCH AND TEACHING BEYOND THE INITIAL, CONDENSED CONTENT. ANOTHER SECTION DESCRIBES ENERGY AUDITS FOR SCHOOL BUILDINGS AS WELL AS SUGGESTING GUIDELINES FOR STARTING A DISTRICT ENERGY PROGRAM. (AUTHOR/MLF)

INSTITUTION NAME: NEW JERSEY STATE DEPT. OF EDUCATION, TRENTON.

ACCESSION NUMBER: ED144460

CLEARINGHOUSE ACCESSION NUMBER: HE009245

PUBLICATION DATE: DEC 76

TITLE: ENERGY CONSERVATION ON CAMPUS. VOLUME 1. GUIDELINES.

INSTITUTION CODE: BBB12650

DESCRIPTOR: BUILDING OPERATION; CAMPUS PLANNING; COSTS; EDUCATIONAL ECONOMICS; *EDUCATIONAL FACILITIES; EDUCATIONAL FINANCE; *ENERGY; *ENERGY CONSERVATION; FACILITY REQUIREMENTS; *FUEL CONSUMPTION; *HIGHER EDUCATION; *MANAGEMENT; NATURAL RESOURCES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$2.06 PLUS POSTAGE.

DESCRIPTIVE NOTE: 45P.; SOME PARTS MAY BE MARGINALLY LEGIBLE DUE TO SMALL PRINT OF THE ORIGINAL

ISSUE: RIEFEB78

ABSTRACT: THE HIGH COST OF ENERGY AND THE CURTAILMENT OF PRIMARY PREFERRED FUEL HAS UPSET MANY LONG-STANDING MAINTENANCE AND OPERATION POLICIES, FORCING INSTITUTIONS TO LOOK QUICKLY FOR WAYS TO REDUCE ENERGY USAGE. THIS BOOKLET IS DESIGNED TO ASSIST INSTITUTIONS OF HIGHER EDUCATION IN ESTABLISHING OR UPGRADING ENERGY CONSERVATION PROGRAMS. THE DEVELOPMENT OF THE CAMPUS ENERGY MANAGEMENT PROGRAM IS DISCUSSED INCLUDING ELEMENTS OF THE PROGRAM; COMMITMENT; ENERGY CONSERVATION COMMITTEE; AN ENERGY MANAGEMENT OFFICER; ENERGY USE AND COST INFORMATION; AND RESULTS, MEASUREMENT, AND EVALUATION TECHNIQUES. ENERGY CONSUMPTION REDUCTION CATEGORIES THAT ARE DETAILED INCLUDE "QUICK-FIX" SYSTEMS, "REFIT" SYSTEMS, AND SYSTEMS CAPABLE OF BEING CONVERTED. EACH OF THESE CATEGORIES IS PRESENTED IN DETAIL ALONG WITH A CHECKLIST OF IDEAS TO IMPLEMENT AND SUSTAIN AN ENERGY MANAGEMENT PROGRAM ON THE CAMPUS. (JSF)

CONTRACT NUMBER: CO-04-50247-00

AVAILABILITY: SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON, D.C. 20402 (STOCK NUMBER 041-018-00125-3, $0.90)

INSTITUTION NAME: FEDERAL ENERGY ADMINISTRATION, WASHINGTON, D.C.

ACCESSION NUMBER: ED144789

CLEARINGHOUSE ACCESSION NUMBER: SE022975

PUBLICATION DATE: 77

TITLE: GROWTH IMPLICATIONS AND THE EARTH'S FUTURE: A STUDY OF CURRICULUM MATERIALS AND STUDENT VIEWS.

PERSONAL AUTHOR: FELT, MARILYN CLAYTON; AND OTHERS

INSTITUTION CODE: GZY23587

SPONSORING AGENCY CODE: BBB00123

DESCRIPTOR: CONSERVATION EDUCATION; *CURRICULUM EVALUATION; *EDUCATIONAL RESEARCH; *ENERGY CONSERVATION; *ENVIRONMENTAL EDUCATION; INSTRUCTIONAL MATERIALS; NATURAL RESOURCES; PROGRAM EVALUATION; SCIENCE EDUCATION; *SECONDARY EDUCATION

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$7.35 PLUS POSTAGE.

DESCRIPTIVE NOTE: 149P.; PORTIONS OF PAGES 85, 106, 108, AND 110 AND ALL OF PAGE 113 HAVE BEEN DELETED DUE TO COPYRIGHT RESTRICTIONS

ISSUE: RIEFEB78

ABSTRACT: THIS BOOK PRESENTS THE RESULTS OF A STUDY DONE TO DETERMINE WHETHER THE CURRICULA AVAILABLE FOR SECONDARY STUDENTS ARE ADEQUATE FOR UNDERSTANDING GROWTH IMPLICATIONS OF RESOURCE USAGE AND FOR MAKING PREDICTIONS ABOUT THE EARTH'S FUTURE. THE FIRST SECTION OF THE BOOK IS CONCERNED WITH THE EVALUATION COMMITTEE'S CONSENSUS ON PEDAGOGICAL CRITERIA, CURRICULUM GOALS, AND UNDERLYING CONCEPTS. THE SECOND SECTION RELATES THE EVALUATION FINDINGS FROM THE STUDENT PERSPECTIVE. (SECONDARY STUDENTS WERE QUESTIONED WITH RESPECT TO WORLD VIEWS, CONCEPTUAL UNDERSTANDING, AND PROBLEM IDENTIFICATION, ANALYSIS, AND EVALUATION.) THE THIRD SECTION GIVES A REVIEW OF THE CURRICULUM MATERIALS BASED ON TEACHER EVALUATIONS AND THE LAST SECTION STATES THE NUMEROUS CONCLUSIONS DRAWN FROM THE STUDY. THE LATTER DISCUSSES EIGHT AREAS OF EVALUATION INCLUDING STUDENT DIFFERENCES, PEDAGOGY AND TEACHER PREPARATION, AND SYSTEMS SKILLS. AN APPENDIX CONTAINS THE STUDENT INTERVIEW QUESTIONS AND THE TEACHER CURRICULUM REVIEW FORM, LISTINGS OF THE PUBLISHERS SURVEYED AND THE EDUCATORS AND PRACTITIONERS INTERVIEWED, AND A BIBLIOGRAPHY OF THE CURRICULUM MATERIALS REVIEWED. (MA)

INSTITUTION NAME: EDUCATION DEVELOPMENT CENTER, INC., NEWTON, MASS.

SPONSORING AGENCY NAME: ROCKEFELLER BROS. FUND, NEW YORK, N.Y.

ACCESSION NUMBER: ED144826

CLEARINGHOUSE ACCESSION NUMBER: SE023119

PUBLICATION DATE: JUN 77

TITLE: MAN AND ENVIRONMENT TEACHING ALTERNATIVES.

PERSONAL AUTHOR: MCCABE, ROBERT H., ED.; AND OTHERS

INSTITUTION CODE: BBB11400; BBB14601

SPONSORING AGENCY CODE: RMQ66G00

DESCRIPTOR: *CURRICULUM GUIDES; ELEMENTARY SECONDARY EDUCATION; ENERGY CONSERVATION; *ENVIRONMENTAL EDUCATION; *INSTRUCTIONAL MATERIALS; INTERDISCIPLINARY APPROACH; *LEARNING ACTIVITIES; *SCIENCE EDUCATION; VALUES; MAN AND ENVIRONMENT; MIAMI DADE COMMUNITY COLLEGE FL

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$18.07 PLUS POSTAGE.

DESCRIPTIVE NOTE: 336P.

ISSUE: RIEFEB78

ABSTRACT: THE MATERIAL CONTAINED IN THIS DOCUMENT IS THE RESULT OF AN EDUCATION PROFESSIONS DEVELOPMENT ACT GRANT AWARDED TO MIAMI-DADE JUNIOR COLLEGE FOR THE FISCAL YEAR 1976. MUCH OF THE MATERIAL WAS DEVELOPED IN A TWO-WEEK TEACHER TRAINING WORKSHOP HELD IN JULY, 1976, IN MIAMI BEACH, FLORIDA. IN THIS SESSION, 40 FACULTY MEMBERS FROM ACROSS THE COUNTRY, CONSULTANTS, AND WORKSHOP STAFF CONTRIBUTED INITIAL INPUT FOR THIS DOCUMENT. THE MATERIAL IN THIS BOOK IS INTENDED TO EXPAND THE FORMAT OF THE "MAN AND ENVIRONMENT REVISED CURRICULUM" BY MAKING THIS MORE USEFUL FOR TEACHERS TO TEACH THE VARIOUS TOPICS. OVER 30 TOPICS ARE COVERED IN THE PUBLICATION, INCLUDING VALUE SYSTEMS, POLLUTION, POPULATION DYNAMICS, AND ECONOMICS. EVERY TOPIC IS THEN SUBDIVIDED INTO ALTERNATIVES. EACH ALTERNATIVE IS COMPOSED OF AN OVERVIEW CONTAINING BACKGROUND INFORMATION ON THE TOPIC, THE BASIC CONCEPT TO BE LEARNED, STUDENT LEARNING OBJECTIVES, AND TEACHING/LEARNING STRATEGIES. CONTAINED WITHIN THIS BOOK ARE A MULTITUDE OF IDEAS ABOUT HOW ELEMENTARY AND SECONDARY GRADE TEACHERS MAY PRESENT THE MODULAR TOPICS OF MAN AND ENVIRONMENT IN AN INTERDISCIPLINARY FRAMEWORK. THE BOOK IS DESIGNED AS A SUPPLEMENT TO OTHER MAN AND ENVIRONMENT AND ECOLOGICAL MATERIALS. (AUTHOR/MA)

AVAILABILITY: INFORMATION REFERENCE CENTER (ERIC/IRC), THE OHIO STATE UNIVERSITY, 1200 CHAMBERS RD., 3RD FLOOR, COLUMBUS, OHIO 43212 ($6.00)

INSTITUTION NAME: MIAMI-DADE COMMUNITY COLL., FLA.; OHIO STATE UNIV., COLUMBUS, OHIO. INFORMATION REFERENCE CENTER FOR SCIENCE, MATHEMATICS, AND ENVIRONMENTAL EDUCATION.

SPONSORING AGENCY NAME: OFFICE OF EDUCATION (DHEW), WASHINGTON, D.C.

ACCESSION NUMBER: ED144828

CLEARINGHOUSE ACCESSION NUMBER: SE023124

PUBLICATION DATE: MAR 77

TITLE: SOLAR ENERGY IN AMERICA'S FUTURE, A PRELIMINARY ASSESSMENT.

INSTITUTION CODE: BBB14940

DESCRIPTOR: CONSERVATION EDUCATION; *ENERGY CONSERVATION; *ENVIRONMENTAL EDUCATION; ENVIRONMENTAL INFLUENCES; ENVIRONMENTAL RESEARCH; NATURAL RESOURCES; SCIENCE EDUCATION; *SOCIOECONOMIC INFLUENCES; *SOLAR RADIATION; *TECHNOLOGY; *ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$6.01 PLUS POSTAGE.

DESCRIPTIVE NOTE: 123P.; SOME CHARTS MAY BE MARGINALLY LEGIBLE DUE TO SMALL PRINT OF THE ORIGINAL DOCUMENT

ISSUE: RIEFEB78

ABSTRACT: THIS REPORT WAS PREPARED AS AN ACCOUNT OF WORK SPONSORED BY THE UNITED STATES GOVERNMENT. THE REPORT DOCUMENTS A STANFORD RESEARCH INSTITUTE STUDY OF THE POTENTIAL ROLES THAT SOLAR ENERGY TECHNOLOGIES COULD HAVE FOR MEETING U.S. ENERGY NEEDS OVER THE NEXT 45 YEARS. COMPUTER SIMULATIONS OF DIFFERENT ENERGY SUPPLY PROJECTIONS WERE DEVELOPED BY VARYING THE INPUT PARAMETERS OF ENERGY DEMANDS AND ENERGY COSTS. THREE OF THESE PROJECTIONS WERE CHOSEN TO BE DEVELOPED AND EXPANDED INTO BROADER SCENARIOS. FIRST, THE IMPLEMENTATION MEASURES REQUIRED TO REALIZE THESE SCENARIOS WERE DELINEATED. THEN, THE ECONOMIC, SOCIOECONOMIC, SOCIOPOLITICAL AND ENVIRONMENTAL ISSUES ASSOCIATED WITH DIFFERENT ENERGY FUTURES WERE IDENTIFIED, AND THESE ISSUES WERE COMPARED AMONG THE THREE SCENARIOS. FINALLY, SIX MAJOR SOCIETAL ISSUES WERE SYNTHESIZED FROM AN ANALYSIS OF THE SCENARIOS. THESE ISSUES AND THE THREE SCENARIOS WERE EVALUATED FROM THE PERSPECTIVES OF INDIVIDUALS IN DIFFERENT PERCEPTUAL FRAMES OF REFERENCE. THIS REPORT INCLUDES A GLOSSARY OF TERMS AND A REFERENCE AND BIBLIOGRAPHY SECTION. (AUTHOR/MA)

REPORT NUMBER: ERDA-OSE-115/1

AVAILABILITY: SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON, D.C. 20402 (STOCK NUMBER 060-000-00051-0, $2.00)

INSTITUTION NAME: ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION, WASHINGTON, D.C. DIV. OF SOLAR ENERGY.

ACCESSION NUMBER: ED145586

CLEARINGHOUSE ACCESSION NUMBER: EA010057

PUBLICATION DATE: 77

TITLE: SOLAR HEATING AND COOLING: AN ECONOMIC ASSESSMENT.

PERSONAL AUTHOR: MCGARITY, ARTHUR E.

INSTITUTION CODE: BB015432

DESCRIPTOR: *AIR CONDITIONING; COMPARATIVE ANALYSIS; *COST EFFECTIVENESS; *ECONOMIC RESEARCH; *ENERGY CONSERVATION; EQUIPMENT; FUEL CONSUMPTION; FUELS; FUTURES (OF SOCIETY); *HEATING; LIFE CYCLE COSTING; PERFORMANCE SPECIFICATIONS; *SOLAR RADIATION; STORAGE; TECHNOLOGICAL ADVANCEMENT

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$3.50 PLUS POSTAGE.

DESCRIPTIVE NOTE: 91P.; SOME PARTS ARE MARGINALLY LEGIBLE DUE TO TYPE SIZE

ISSUE: RIEMAR78

ABSTRACT: THIS STUDY SERVES AS AN INTRODUCTION TO THE IMPORTANT ECONOMIC CONSIDERATIONS THAT ARE NECESSARY FOR AN ASSESSMENT OF THE POTENTIAL FOR SOLAR HEATING AND COOLING IN THE UNITED STATES. THE FIRST CHAPTER INTRODUCES THE TECHNOLOGY THAT IS USED TO TAP SOLAR ENERGY FOR RESIDENTIAL AND COMMERCIAL APPLICATIONS AND ILLUSTRATES THE POTENTIAL SIGNIFICANCE OF THIS ENERGY SOURCE ON A NATIONAL SCALE. A METHODOLOGY FOR ASSESSING THE ECONOMIC FEASIBILITY OF SOLAR HEATING AND COOLING IS PRESENTED IN THE SECOND CHAPTER WITH THE RESULTS OF A STUDY OF MATERIAL, LABOR, MARKETING, AND ENGINEERING COSTS OF SOLAR EQUIPMENT. THE THIRD CHAPTER APPLIES THE METHODOLOGY TO A STUDY OF THE ECONOMIC FEASIBILITY OF RESIDENTIAL SOLAR HEATING IN 20 CITIES. THE POTENTIAL FOR REDUCTIONS IN THE COST OF SOLAR EQUIPMENT THROUGH MASS PRODUCTION AND TECHNOLOGY IMPROVEMENTS, AND THE EFFECTS OF INCREASES IN CONVENTIONAL FUEL PRICES ARE INCLUDED IN THE FEASIBILITY ASSESSMENTS. FINALLY, NATIONAL SECURITY, ENVIRONMENTAL, AND INSTITUTIONAL CONSIDERATIONS ARE DISCUSSED TO PLACE THE ECONOMIC ASSESSMENT IN ITS PROPER PERSPECTIVE. (AUTHOR)

AVAILABILITY: SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON, D.C. 20402 (STOCK NO. 038-000-00300-3; $1.20)

INSTITUTION NAME: NATIONAL SCIENCE FOUNDATION, WASHINGTON, D.C. DIV. OF POLICY RESEARCH AND ANALYSIS.

ACCESSION NUMBER: ED145599

CLEARINGHOUSE ACCESSION NUMBER: EA010068

PUBLICATION DATE: 76

TITLE: SOLAR HEATING AND COOLING OF BUILDINGS: ACTIVITIES OF THE PRIVATE SECTOR OF THE BUILDING COMMUNITY AND ITS PERCEIVED NEEDS RELATIVE TO INCREASED ACTIVITY.

INSTITUTION CODE: BB015033

DESCRIPTOR: *AIR CONDITIONING; BUILDING INNOVATION; BUILDINGS; *BUSINESS; *CONSTRUCTION INDUSTRY; ENERGY CONSERVATION; EQUIPMENT; FUEL CONSUMPTION; *HEATING; INFORMATION NEEDS; NATIONAL SURVEYS; *NEEDS ASSESSMENT; *PERFORMANCE SPECIFICATIONS; QUESTIONNAIRES; RESEARCH NEEDS; RESEARCH PROJECTS; *SOLAR RADIATION; TECHNOLOGICAL ADVANCEMENT

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$3.50 PLUS POSTAGE.

DESCRIPTIVE NOTE: 67P.

ISSUE: RIEMAR78

ABSTRACT: THIS REPORT IS ESSENTIALLY A COLLECTION OF INFORMATION GATHERED FROM A BROAD CROSS-SECTION OF THE BUILDING COMMUNITY THAT PROVIDES A DESCRIPTION OF THE STATE OF AFFAIRS EXISTING MID-1974 THROUGH MID-1975 IN THE PRIVATE SECTOR OF THE BUILDING COMMUNITY WITH REGARD TO SOLAR HEATING AND COOLING OF BUILDINGS. THE REPORT ADDITIONALLY CONTAINS INFORMATION ABOUT THE NEEDS PERCEIVED BY THE PRIVATE SECTOR WITH REGARD TO GOVERNMENTAL ACTIONS BESIDES RESEARCH REQUIRED TO INDUCE WIDESPREAD APPLICATION OF SOLAR ENERGY FOR THE HEATING AND COOLING OF BUILDINGS. FOLLOWING THE FIRST SECTION THAT OUTLINES THE BACKGROUND AND PURPOSE OF THE REPORT AND THE CONDUCT OF THE STUDY, THE REMAINDER OF THE REPORT IS DIVIDED INTO TWO SECTIONS: (1) ACTIVITIES OF THE BUILDING COMMUNITY DESCRIBES SELECTED INTERESTS AND PROJECTS OF INDIVIDUALS AND ORGANIZATIONS; AND (2) EXPRESSED NEEDS AND CONCERNS OF THE BUILDING COMMUNITY DESCRIBES THE NONPROPRIETARY TECHNICAL INFORMATION NEEDS AND THE SOCIETAL/INSTITUTIONAL, BUILDING DESIGN/CONSTRUCTION, AND PRODUCT DESIGN/MANUFACTURE CONCERNS VOICED BY THE PRIVATE SECTOR OF THE BUILDING COMMUNITY. (AUTHOR/MLF)

INSTITUTION NAME: NATIONAL ACADEMY OF SCIENCES - NATIONAL RESEARCH COUNCIL, WASHINGTON, D.C. COMMITTEE ON SOLAR ENERGY IN THE HEATING AND COOLING OF BUILDINGS.

ACCESSION NUMBER: ED146042

CLEARINGHOUSE ACCESSION NUMBER: SE023257

PUBLICATION DATE: APR 75

TITLE: IN THE BANK...OR UP THE CHIMNEY? A DOLLARS AND CENTS GUIDE TO ENERGY-SAVING HOME IMPROVEMENTS.

PERSONAL AUTHOR: ACKERMAN, ALLAN D.; AND OTHERS

INSTITUTION CODE: MGG001U0

SPONSORING AGENCY CODE: BBB121U0

DESCRIPTOR: CLIMATE CONTROL; CONSERVATION EDUCATION; *CONSUMER SCIENCE; *ENERGY CONSERVATION; *ENVIRONMENTAL EDUCATION; FAMILY ENVIRONMENT; *FUEL CONSUMPTION; *GUIDES; INSTRUCTIONAL MATERIALS; NATURAL RESOURCES

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 78P.; NOT AVAILABLE IN HARD COPY DUE TO NUMEROUS COLORED PRINT, SHADED CHARTS AND GRAPHS

ISSUE: RIEMAR78

ABSTRACT: THIS BOOK IS DESIGNED TO ANSWER ENERGY CONSERVATION QUESTIONS ABOUT THE HOME. IT EXPLAINS WHAT ENERGY CONSERVATION PROCEDURES ARE MOST EFFICIENT AND UNDER WHAT CONDITIONS, MEANS FOR ESTIMATING THE FINANCIAL COST OF THESE ENERGY-SAVING HOME IMPROVEMENTS ARE INCLUDED. THE BOOK IS DIVIDED INTO FOUR PARTS: (1) A QUICK LOOK AT YOUR HOME; (2) A CLOSER LOOK AT YOUR HOME; (3) HOW TO DO IT; AND (4) MORE...ON HOW TO SAVE HEATING AND COOLING ENERGY. THE BOOK HAS NUMEROUS ILLUSTRATIONS THAT HELP THE READER MAKE DECISIONS AND FOLLOW DIRECTIONS. AN ENERGY CHECKLIST THAT INCLUDES FINANCIAL ASPECTS OF WEATHERIZING HOMES IS INCLUDED. (MA)

REPORT NUMBER: HUD-PDR-89(2)

CONTRACT NUMBER: H-2179-R

AVAILABILITY: SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON, D.C. 20402 (STOCK NUMBER 023-000-00297-3, $1.70)

INSTITUTION NAME: ABT ASSOCIATES, INC. CAMBRIDGE, MASS.

SPONSORING AGENCY NAME: DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT, WASHINGTON, D.C. OFFICE OF POLICY DEVELOPMENT AND RESEARCH.

ACCESSION NUMBER: ED146044

CLEARINGHOUSE ACCESSION NUMBER: SE023262

PUBLICATION DATE: 77

TITLE: ENERGY CONSERVATION ACTIVITY PACKET, K-2.

PERSONAL AUTHOR: BAKKE, RUTH

INSTITUTION CODE: BB015026; JX038625

DESCRIPTOR: *ELEMENTARY EDUCATION; ENERGY; *ENERGY CONSERVATION; ENVIRONMENTAL EDUCATION; *INSTRUCTIONAL MATERIALS; *NATURAL RESOURCES; PRIMARY GRADES; RESOURCE MATERIALS; SCIENCE EDUCATION; *TEACHING GUIDES; VALUES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$4.67 PLUS POSTAGE.

DESCRIPTIVE NOTE: 83P.; FOR RELATED DOCUMENTS, SEE SE 023 263-266; ENERGY ACTIVITIES, PRIMARY K-2 GAMEBOARD 1 AND POSTERS 1 AND 2 REMOVED

ISSUE: RIEMAR78

ABSTRACT: THIS BOOK WAS DEVELOPED IN RESPONSE TO THE CONCERN FOR ENERGY CONSERVATION. IT CONTAINS ACTIVITIES THAT STRESS AN ENERGY CONSERVATION ETHIC AND INCLUDES MANY VALUES CLARIFICATION ACTIVITIES FOR GRADES K-2. THE TEACHER IS PROVIDED WITH SOME BACKGROUND INFORMATION ON ENERGY, AN EXTENSIVE TEACHER'S ANNOTATED BIBLIOGRAPHY, AND A LIST OF RESOURCES. THE TOPIC OF ENERGY IS DIVIDED INTO CONCEPTS AND OBJECTIVES, WITH ACTIVITIES INTERSPERSED WHERE APPROPRIATE. THERE ARE OVER 40 PAGES OF DITTO AND TRANSPARENCY MASTERS, TWO POSTERS, AND A GAME FOR THE TEACHER'S USE. ALSO INCLUDED IS AN EVALUATION SHEET FOR THE TEACHER TO ASSESS THE ACTIVITY PACKET. (MA)

AVAILABILITY: IOWA ENERGY POLICY COUNCIL, STATE CAPITAL COMPLEX, DES MOINES, IOWA 50319 ($10.00 A SET)

INSTITUTION NAME: IOWA STATE DEPT. OF PUBLIC INSTRUCTION, DES MOINES.; IOWA STATE ENERGY POLICY COUNCIL, DES MOINES.

ACCESSION NUMBER: ED146045

CLEARINGHOUSE ACCESSION NUMBER: SE023263

PUBLICATION DATE: 77

TITLE: ENERGY CONSERVATION ACTIVITY PACKET, GRADE 3.

PERSONAL AUTHOR: BAKKE, RUTH

INSTITUTION CODE: 88015026; JX038625

DESCRIPTOR: *ELEMENTARY EDUCATION; ENERGY; *ENERGY CONSERVATION; ENVIRONMENTAL EDUCATION; GRADE 3; *INSTRUCTIONAL MATERIALS; *NATURAL RESOURCES; RESOURCE MATERIALS; SCIENCE EDUCATION; *TEACHING GUIDES; VALUES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$4.67 PLUS POSTAGE.

DESCRIPTIVE NOTE: 81P.; FOR RELATED DOCUMENTS, SEE SE 023 262-266

ISSUE: RIEMAR78

ABSTRACT: THIS ACTIVITY PACKET FOR GRADE 3 IS ONE OF A SERIES DEVELOPED IN RESPONSE TO THE CONCERN FOR ENERGY CONSERVATION. IT CONTAINS ACTIVITIES THAT STRESS AN ENERGY CONSERVATION ETHIC AND INCLUDES MANY VALUES CLARIFICATION ACTIVITIES FOR GRADE THREE. THE PACKET IS DIVIDED INTO TWO PARTS AND PROVIDES THE TEACHER WITH BACKGROUND INFORMATION, CONCEPTS AND OBJECTIVES, AND ACTIVITIES FOR EACH PART. TWO ANNOTATED BIBLIOGRAPHIES, ONE FOR TEACHERS AND THE OTHER FOR STUDENTS, ARE ALSO INCLUDED. THE TEACHER IS PROVIDED WITH DITTO AND TRANSPARENCY MASTER PAGES TO USE IN THE CLASSROOM. AN EVALUATION SHEET AND A LIST OF RESOURCES ARE ALSO A PART OF THIS ACTIVITY PACKET. (MA)

AVAILABILITY: IOWA ENERGY POLICY COUNCIL, STATE CAPITAL COMPLEX, DES MOINES, IOWA 50319 ($10.00 A SET)

INSTITUTION NAME: IOWA STATE DEPT. OF PUBLIC INSTRUCTION, DES MOINES.; IOWA STATE ENERGY POLICY COUNCIL, DES MOINES.

ACCESSION NUMBER: ED146046

CLEARINGHOUSE ACCESSION NUMBER: SE023264

PUBLICATION DATE: 77

TITLE: ENERGY CONSERVATION ACTIVITY PACKET, GRADE 4.

PERSONAL AUTHOR: BAKKE, RUTH

INSTITUTION CODE: 88015026; JX038625

DESCRIPTOR: *ELEMENTARY EDUCATION; ENERGY; *ENERGY CONSERVATION; ENVIRONMENTAL EDUCATION; GRADE 4; *INSTRUCTIONAL MATERIALS; *NATURAL RESOURCES; RESOURCE MATERIALS; SCIENCE EDUCATION; *TEACHING GUIDES; VALUES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$6.01 PLUS POSTAGE.

DESCRIPTIVE NOTE: 102P.; FOR RELATED DOCUMENTS, SEE SE 023 262-266

ISSUE: RIEMAR78

ABSTRACT: THIS ACTIVITY PACKET FOR GRADE 4 IS ONE OF A SERIES DEVELOPED IN RESPONSE TO THE CONCERN FOR ENERGY CONSERVATION. IT CONTAINS ACTIVITIES THAT STRESS AN ENERGY CONSERVATION ETHIC AND INCLUDES MANY VALUES CLARIFICATION ACTIVITIES FOR GRADE FOUR. THE PACKET IS DIVIDED INTO TWO PARTS AND PROVIDES THE TEACHER WITH BACKGROUND INFORMATION, CONCEPTS AND OBJECTIVES, AND ACTIVITIES FOR EACH PART. PART ONE IS CONCERNED WITH ENERGY CONVERSION AND PART TWO WITH ENERGY PRODUCTION AND USE. TWO ANNOTATED BIBLIOGRAPHIES, ONE FOR TEACHERS AND THE OTHER FOR STUDENTS, ARE ALSO INCLUDED. THE TEACHER IS PROVIDED WITH PAGES FOR DUPLICATION, AN EVALUATION FORM AND A LIST OF RESOURCES ARE ALSO A PART OF THIS ACTIVITY PACKET. (MA)

AVAILABILITY: IOWA ENERGY POLICY COUNCIL, STATE CAPITAL COMPLEX, DES MOINES, IOWA 50319 ($10.00 A SET)

INSTITUTION NAME: IOWA STATE DEPT. OF PUBLIC INSTRUCTION, DES MOINES.; IOWA STATE ENERGY POLICY COUNCIL, DES MOINES.

ACCESSION NUMBER: ED146047

CLEARINGHOUSE ACCESSION NUMBER: SE023265

PUBLICATION DATE: 77

TITLE: ENERGY CONSERVATION ALTIVITY PACKET, GRADE 5.

PERSONAL AUTHOR: BAKKE, RUTH

INSTITUTION CODE: 88015026; JX038625

DESCRIPTOR: *ELEMENTARY EDUCATION; ENERGY; *ENERGY CONSERVATION; ENVIRONMENTAL EDUCATION; GRADE 5; *INSTRUCTIONAL MATERIALS; *NATURAL RESOURCES; RESOURCE MATERIALS; SCIENCE EDUCATION; *TEACHING GUIDES; VALUES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$4.67 PLUS POSTAGE.

DESCRIPTIVE NOTE: 94P.; FOR RELATED DOCUMENTS, SEE SE 023 262-266

ISSUE: RIEMAR78

ABSTRACT: THIS ACTIVITY PACKET FOR GRADE 5 IS ONE OF A SERIES DEVELOPED IN RESPONSE TO CONCERN FOR ENERGY CONSERVATION. IT CONTAINS ACTIVITIES THAT STRESS AN ENERGY CONSERVATION ETHIC AND INCLUDES MANY VALUES CLARIFICATION ACTIVITIES FOR GRADE FIVE. THE PACKET IS DIVIDED INTO TWO PARTS AND PROVIDES THE TEACHER WITH BACKGROUND INFORMATION, CONCEPTS AND OBJECTIVES, AND ACTIVITIES FOR EACH PART. PART ONE IS CONCERNED WITH FOSSIL FUELS AND PART TWO WITH THE HISTORY OF ENERGY IN IOWA. TWO ANNOTATED BIBLIOGRAPHIES, ONE FOR TEACHERS AND THE OTHER FOR STUDENTS, ARE ALSO INCLUDED. THE TEACHER IS PROVIDED WITH DITTO AND TRANSPARENCY MASTER PAGES TO USE IN THE CLASSROOM. AN EVALUATION SHEET AND A LISTING OF RESOURCES ARE ALSO A PART OF THIS ACTIVITY PACKET. (MA)

AVAILABILITY: IOWA ENERGY POLICY COUNCIL, STATE CAPITAL COMPLEX, DES MOINES, IOWA 50319 ($10.00 A SET)

INSTITUTION NAME: IOWA STATE DEPT. OF PUBLIC INSTRUCTION, DES MOINES.; IOWA STATE ENERGY POLICY COUNCIL, DES MOINES.

ACCESSION NUMBER: ED146048

CLEARINGHOUSE ACCESSION NUMBER: SE023266

PUBLICATION DATE: 77

TITLE: ENERGY CONSERVATION ACTIVITY PACKET, GRADE 6.

PERSONAL AUTHOR: BAKKE, RUTH

INSTITUTION CODE: 88015026; JX038625

DESCRIPTOR: *ELEMENTARY EDUCATION; ENERGY; *ENERGY CONSERVATION; ENVIRONMENTAL EDUCATION; GRADE 6; *INSTRUCTIONAL MATERIALS; *NATURAL RESOURCES; RESOURCE MATERIALS; SCIENCE EDUCATION; *TEACHING GUIDES; VALUES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$6.01 PLUS POSTAGE.

DESCRIPTIVE NOTE: 102P.; FOR RELATED DOCUMENTS, SEE SE 023 262-266

ISSUE: RIEMAR78

ABSTRACT: THIS ACTIVITY PACKET FOR GRADE 6 IS ONE OF A SERIES DEVELOPED IN RESPONSE TO THE CONCERN FOR ENERGY CONSERVATION. IT CONTAINS ACTIVITIES THAT STRESS AN ENERGY CONSERVATION ETHIC AND INCLUDES MANY VALUES CLARIFICATION ACTIVITIES FOR GRADE SIX. THE PACKET IS DIVIDED INTO TWO PARTS AND PROVIDES THE TEACHER WITH BACKGROUND INFORMATION, CONCEPTS AND OBJECTIVES, AND ACTIVITIES FOR EACH PART. PART ONE IS CONCERNED WITH THE LIMITS OF ENERGY SOURCES AND PART TWO WITH ALTERNATIVE ENERGY SOURCES. TWO ANNOTATED BIBLIOGRAPHIES, ONE FOR TEACHERS AND THE OTHER FOR STUDENTS, ARE ALSO INCLUDED. THE TEACHER IS PROVIDED WITH DITTO AND TRANSPARENCY MASTER PAGES FOR DUPLICATION. AN EVALUATION SHEET AND A LISTING OF RESOURCES ARE ALSO A PART OF THIS ACTIVITY PACKET. (MA)

AVAILABILITY: IOWA ENERGY POLICY COUNCIL, STATE CAPITAL COMPLEX, DES MOINES, IOWA 50319 ($10.00 A SET)

INSTITUTION NAME: IOWA STATE DEPT. OF PUBLIC INSTRUCTION, DES MOINES.; IOWA STATE ENERGY POLICY COUNCIL, DES MOINES.

ACCESSION NUMBER: ED146059

CLEARINGHOUSE ACCESSION NUMBER: SE023373

PUBLICATION DATE: AUG 77

TITLE: TIPS FOR ENERGY SAVERS IN AND AROUND THE HOME, ON THE ROAD, IN THE MARKETPLACE.

INSTITUTION CODE: 88012650; 88013553

DESCRIPTOR: *CONSERVATION EDUCATION; *CONSUMER EDUCATION; *ENERGY; ENERGY CONSERVATION; *INSTRUCTIONAL MATERIALS; *NATURAL RESOURCES; RESOURCE MATERIALS; SCIENCE EDUCATION

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$2.06 PLUS POSTAGE.

DESCRIPTIVE NOTE: 47P.

ISSUE: RIEMAR78

ABSTRACT: THE PAMPHLET PROVIDES TIPS FOR THE CONSUMER ON HOW TO SAVE ENERGY AND DOLLARS IN AND AROUND THE HOME; ON THE ROAD IN TRAVELING FOR WORK, SHOPPING, OR LEISURE; AND IN THE MARKETPLACE WHILE BUYING A CAR, HOME, OR APPLIANCE. (AUTHOR)

REPORT NUMBER: FEA/D-77/212

AVAILABILITY: TIPS FOR ENERGY SAVERS, ENERGY CONSERVATION NOW, PUEBLO, COLORADO 81009 (FREE)

INSTITUTION NAME: ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION, WASHINGTON, D.C.; FEDERAL ENERGY ADMINISTRATION, WASHINGTON, D.C.

ACCESSION NUMBER: ED146693

CLEARINGHOUSE ACCESSION NUMBER: EA010098

PUBLICATION DATE: SEP 77

TITLE: THERMAL [illegible]IALYSIS—HUMAN COMFORT—INDOOR ENVIRONMENTS. NBS SPECIAL PUBLICATION 491.

PERSONAL AUTHOR: MANGUM, BILLY W., ED.; HILL, JAMES E., ED.

INSTITUTION CODE: PGK56375

DESCRIPTOR: ENERGY CONSERVATION; *ENVIRONMENTAL RESEARCH; *HUMAN ENGINEERING; INSTRUMENTATION; *INTERIOR SPACE; *PHYSICAL DESIGN NEEDS; PRODUCTIVITY; RESEARCH; SYMPOSIA; *THERMAL ENVIRONMENT

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 205P.; PROCEEDINGS OF A SYMPOSIUM HELD AT THE NATIONAL BUREAU OF STANDARDS (GAITHERSBURG, MARYLAND, FEBRUARY 11, 1977); NOT AVAILABLE IN PAPER COPY DUE SMALL PRINT SIZE OF ORIGINAL DOCUMENT

ISSUE: RIEAPR78

ABSTRACT: INCLUDED IN THESE PROCEEDINGS ARE 11 FORMAL PAPERS PRESENTED BY LEADING RESEARCHERS IN THE FIELD OF THERMAL COMFORT AND HEAT STRESS AT A SYMPOSIUM HELD FOR THE PURPOSE OF EXPLORING NEW ASPECTS OF INDOOR THERMAL ENVIRONMENTS, CAUSED PRIMARILY BY THE IMPACT OF ENERGY

CONSERVATION IN NEW AND EXISTING BUILDINGS. THE CONTRIBUTED PAPERS WERE FROM DENMARK, SWEDEN, AND SEVERAL RESEARCH INSTITUTIONS IN THE UNITED STATES, INCLUDING THE JOHN B. PIERCE FOUNDATION AT YALE UNIVERSITY, KANSAS STATE UNIVERSITY, AND PENNSYLVANIA STATE UNIVERSITY. INFORMATION WAS PRESENTED ON A VARIETY OF APPROACHES TO DETERMINING HUMAN RESPONSE TO THERMAL ENVIRONMENTS. THESE INCLUDED LABORATORY STUDIES IN ENVIRONMENTAL CHAMBERS UTILIZING INSTRUMENTED HUMAN SUBJECTS, FIELD STUDIES INVOLVING SURVEYS AND QUESTIONNAIRES, MATHEMATICAL MODELING OF HUMANS, AN ANALYSIS OF SOME TYPES OF INSTRUMENTS USED IN ASSESSING THE QUALITY OF ENVIRONMENTS, AND A DISCUSSION OF THE RELATIONSHIPS BETWEEN PRODUCTIVITY AND THE THERMAL ENVIRONMENT. (AUTHOR/MLF)

REPORT NUMBER: NBS-SP-491

AVAILABILITY: SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON, D.C. 20402 (SD CATALOG NO. C13.10:491; STOCK NO. 003-003-01849-0; $3.25; ADD 25% FOR OTHER THAN U.S. MAILING)

INSTITUTION NAME: NATIONAL BUREAU OF STANDARDS (DOC), WASHINGTON, D.C.

ACCESSION NUMBER: ED146694

CLEARINGHOUSE ACCESSION NUMBER: EA010099

PUBLICATION DATE: FEB 76

TITLE: DEVELOPMENT OF PROPOSED STANDARDS FOR TESTING SOLAR COLLECTORS AND THERMAL STORAGE DEVICES. NBS TECHNICAL NOTE 899.

PERSONAL AUTHOR: HILL, JAMES E.; AND OTHERS

INSTITUTION CODE: PGK56375

SPONSORING AGENCY CODE: BB814948

DESCRIPTOR: ENERGY CONSERVATION; EVALUATION METHODS; GRAPHS; HEATING; HEAT RECOVERY; ILLUSTRATIONS; MEASUREMENT INSTRUMENTS; *PERFORMANCE SPECIFICATIONS; *SOLAR RADIATION; *STANDARDS; *STORAGE; TECHNOLOGICAL ADVANCEMENT; *THERMAL ENVIRONMENT

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 323P.; NOT AVAILABLE IN PAPER COPY DUE TO MARGINAL LEGIBILITY OF ORIGINAL DOCUMENT

ISSUE: RIEAPR78

ABSTRACT: A STUDY HAS BEEN MADE AT THE NATIONAL BUREAU OF STANDARDS OF THE DIFFERENT TECHNIQUES THAT ARE OR COULD BE USED FOR TESTING SOLAR COLLECTORS AND THERMAL STORAGE DEVICES THAT ARE USED IN SOLAR HEATING AND COOLING SYSTEMS. THIS REPORT REVIEWS THE VARIOUS TESTING METHODS AND OUTLINES A RECOMMENDED TEST PROCEDURE, INCLUDING APPARATUS AND INSTRUMENTATION, FOR BOTH COMPONENTS. THE RECOMMENDED PROCEDURES HAVE BEEN WRITTEN IN THE FORMAT OF A STANDARD OF THE AMERICAN SOCIETY OF HEATING, REFRIGERATING, AND AIR CONDITIONING ENGINEERS (ASHRAE) AND HAVE BEEN SUBMITTED TO THAT ORGANIZATION FOR CONSIDERATION. (AUTHOR)

REPORT NUMBER: NBS-TN-899

AVAILABILITY: SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON, D.C. 20402 (STOCK NO. 003-003-01579-2/CATALOG NO. C13.46:899; $3.10)

INSTITUTION NAME: NATIONAL BUREAU OF STANDARDS (DOC), WASHINGTON, D.C.

SPONSORING AGENCY NAME: ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION, WASHINGTON, D.C. DIV. OF SOLAR ENERGY.

ACCESSION NUMBER: ED146695

CLEARINGHOUSE ACCESSION NUMBER: EA010100

PUBLICATION DATE: JUN 77

TITLE: WINDOW DESIGN STRATEGIES TO CONSERVE ENERGY. NBS BUILDING SCIENCE SERIES 104.

PERSONAL AUTHOR: HASTINGS, S. ROBERT; CRENSHAW, RICHARD W.

INSTITUTION CODE: PGK56375

SPONSORING AGENCY CODE: BB800129; BB813553

DESCRIPTOR: ARCHITECTURAL ELEMENTS; BUILDING DESIGN; BUILDING MATERIALS; *CLIMATE CONTROL; *DESIGN NEEDS; *ENERGY CONSERVATION; LIGHTING; *PERFORMANCE SPECIFICATIONS; SITE SELECTION; SOLAR RADIATION; STANDARDS; VENTILATION; *WINDOWS

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$11.37 PLUS POSTAGE.

DESCRIPTIVE NOTE: 215P.; PHOTOS MAY NOT REPRODUCE

ISSUE: RIEAPR78

ABSTRACT: A MULTITUDE OF DESIGN STRATEGIES ARE AVAILABLE TO ACHIEVE ENERGY-EFFICIENT WINDOWS. OPPORTUNITIES FOR IMPROVING WINDOW PERFORMANCE FALL INTO SIX GROUPS: SITE, EXTERIOR APPENDAGES, FRAME, GLAZING, INTERIOR ACCESSORIES, AND BUILDING INTERIOR. DESIGN STRATEGIES WITHIN THESE GROUPS CAN IMPROVE ONE OR MORE OF THE SIX ENERGY FUNCTIONS OF WINDOWS: SOLAR HEATING, DAYLIGHTING, SHADING, INSULATION, AIR TIGHTNESS, AND VENTILATION. INCLUDED IN THIS REPORT ARE 33 STRATEGIES; AN EXPLANATION OF THE PHYSICAL PHENOMENA RESPONSIBLE FOR EACH STRATEGY'S ENERGY PERFORMANCE, SUMMARIZED ENERGY AND NONENERGY ADVANTAGES AND DISADVANTAGES; AESTHETIC CONSIDERATIONS; COST APPROXIMATIONS; EXAMPLE INSTALLATIONS; LABORATORY STUDIES OR CALCULATIONS BY THE AUTHORS; AND REFERENCES. INTENDED READERS INCLUDE PROFESSIONAL DESIGNERS, LESSEES AND OWNERS OF COMMERCIAL SPACE, HOME BUYERS AND OWNERS. THE REPORT'S PURPOSE IS TO DRAW ATTENTION TO THE WIDE RANGE OF OPTIONS CURRENTLY AVAILABLE TO CONSERVE ENERGY WITH WINDOWS. (AUTHOR)

REPORT NUMBER: NBS-BSS-104

AVAILABILITY: SUPERINTENDENTS OF DOCUMENTS, U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON, D.C. 20402 (SD CATALOG NO. C13.29/2:104; STOCK NO. 003-003-01794-9; $3.75; ADD 25% ADDITIONAL FOR OTHER THAN U.S. MAILING)

INSTITUTION NAME: NATIONAL BUREAU OF STANDARDS (DOC), WASHINGTON, D.C.

SPONSORING AGENCY NAME: DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT, WASHINGTON, D.C.; ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION, WASHINGTON, D.C.

ACCESSION NUMBER: ED146701

CLEARINGHOUSE ACCESSION NUMBER: EA010107

PUBLICATION DATE: OCT 77

TITLE: SOLAR HEATING AND COOLING OF RESIDENTIAL BUILDINGS: SIZING, INSTALLATION AND OPERATION OF SYSTEMS.

INSTITUTION CODE: BB815118

SPONSORING AGENCY CODE: BB802972

DESCRIPTOR: AIR CONDITIONING; BUILDING IMPROVEMENT; *BUILDING SYSTEMS; CLIMATE CONTROL; COST EFFECTIVENESS; *CURRICULUM; *EDUCATIONAL PROGRAMS; ENERGY CONSERVATION; HEATING; *HOUSING INDUSTRY; ILLUSTRATIONS; LIFE CYCLE COSTING; MECHANICAL EQUIPMENT; *PERFORMANCE SPECIFICATIONS; *SOLAR RADIATION; STANDARDS; STORAGE; WORKSHEETS

EDRS PRICE: EDRS PRICE MF-$1.16 HC-$31.47 PLUS POSTAGE.

DESCRIPTIVE NOTE: 591P.; FOR A RELATED DOCUMENT, SEE EA 010 108

ISSUE: RIEAPR78

ABSTRACT: THIS TRAINING COURSE AND A COMPANION COURSE TITLED "DESIGN OF SYSTEMS FOR SOLAR HEATING AND COOLING OF RESIDENTIAL BUILDINGS," ARE DESIGNED TO TRAIN HOME DESIGNERS AND BUILDERS IN THE FUNDAMENTALS OF SOLAR HYDRONIC AND AIR SYSTEMS FOR SPACE HEATING AND COOLING AND DOMESTIC HOT WATER HEATING FOR RESIDENTIAL BUILDINGS. EACH COURSE, ORGANIZED IN 22 MODULES, PROVIDES 44 HOURS OF INSTRUCTION. THE MODULARIZED STRUCTURE OF THE TRAINING COURSES PROVIDES CONSIDERABLE LATITUDE IN ORGANIZATION AND PRESENTATION, ESPECIALLY WITH REGARD TO THE TIME PERIOD OVER WHICH THE COURSE COULD BE PRESENTED. INCLUDED IN EACH COURSE ARE DIRECTED PERIODS FOR COMPUTATIONAL PRACTICE, INSPECTION OF WORKING SYSTEMS, AND "HANDS-ON" EXPERIENCE WITH MODELS. COURSE STANDARDS AND NEEDS WERE DEVELOPED BY INTERACTING WITH ARCHITECTS, ENGINEERS, BUILDERS, CONTRACTORS, AND INSTALLERS OF HEATING, VENTILATING, AND AIR CONDITIONING SYSTEMS IN RESIDENTIAL BUILDINGS. FROM THE STANDARDS AND NEEDS, OBJECTIVES FOR THE COURSE WERE DEVELOPED AND THE CURRICULAR MATERIALS PREPARED. (AUTHOR/MLF)

AVAILABILITY: SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON, D.C. 20402 (STOCK NO. 003-011-00085-2; $7.00)

INSTITUTION NAME: COLORADO STATE UNIV., FT. COLLINS. SOLAR ENERGY APPLICATIONS LAB.

SPONSORING AGENCY NAME: DEPARTMENT OF COMMERCE, WASHINGTON, D.C.

ACCESSION NUMBER: ED146702

CLEARINGHOUSE ACCESSION NUMBER: EA010108

PUBLICATION DATE: OCT 77

TITLE: SOLAR HEATING AND COOLING OF RESIDENTIAL BUILDINGS: DESIGN OF SYSTEMS.

INSTITUTION CODE: BB815118

SPONSORING AGENCY CODE: BB802972

DESCRIPTOR: AIR CONDITIONING; BUILDING IMPROVEMENT; *BUILDING SYSTEMS; CLIMATE CONTROL; COST EFFECTIVENESS; *CURRICULUM; DESIGN NEEDS; *EDUCATIONAL PROGRAMS; ENERGY CONSERVATION; EQUIPMENT STANDARDS; HEATING; HEAT RECOVERY; *HOUSING INDUSTRY; LIFE CYCLE COSTING; *PERFORMANCE SPECIFICATIONS; *SOLAR RADIATION; TABLES (DATA); THERMAL ENVIRONMENT

EDRS PRICE: EDRS PRICE MF-$1.33 HC-$39.51 PLUS POSTAGE.

DESCRIPTIVE NOTE: 748P.; FOR A RELATED DOCUMENT, SEE EA 010 107

ISSUE: RIEAPR78

ABSTRACT: THIS IS THE SECOND OF TWO TRAINING COURSES DESIGNED TO DEVELOP THE CAPABILITY OF PRACTITIONERS IN THE HOME BUILDING INDUSTRY TO DESIGN SOLAR HEATING AND COOLING SYSTEMS. THE COURSE IS ORGANIZED IN 23 MODULES TO SEPARATE SELECTED TOPICS AND TO FACILITATE LEARNING. ALTHOUGH A COMPACT SCHEDULE OF ONE WEEK IS SHOWN, A VARIETY OF FORMATS CAN BE ARRANGED. IN GENERAL, THE COURSE PROGRESSES FROM SIMPLE SIZING PROCEDURES FOR MAKING PRELIMINARY ESTIMATES OF COLLECTOR AREA REQUIREMENTS, TO A COMPUTER-AIDED METHOD, AND FINALLY TO AUTOMATED DESIGN TECHNIQUES. SUCH DETAILS AS SYSTEM ECONOMICS, ENERGY CONSERVATION TRADE-OFFS, AND COMPONENT SELECTIONS ARE ALSO PRESENTED. (AUTHOR/MLF)

AVAILABILITY: SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON, D.C. 20402 (STOCK NO. 003-011-00084-4; $8.25)

INSTITUTION NAME: COLORADO STATE UNIV., FT. COLLINS. SOLAR ENERGY APPLICATIONS LAB.

SPONSORING AGENCY NAME: DEPARTMENT OF COMMERCE, WASHINGTON, D.C.

ACCESSION NUMBER: ED146933

CLEARINGHOUSE ACCESSION NUMBER: IR005404

PUBLICATION DATE: 28 NOV 77

TITLE: ENERGY ABSTRACTS FOR POLICY ANALYSIS: A CRITICAL ANALYSIS.

PERSONAL AUTHOR: GIANNOBILE, SUZY K.

DESCRIPTOR: *ABSTRACTS; *ENERGY; *EVALUATION; *INDEXES (LOCATORS); INFORMATION SERVICES; *LITERATURE; *ENERGY ABSTRACTS FOR POLICY ANALYSIS

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$1.67 PLUS POSTAGE.

DESCRIPTIVE NOTE: 23P.

ISSUE: RIEAPR78

ABSTRACT: THIS PAPER PRESENTS THE BACKGROUND OF ENERGY ABSTRACTS FOR POLICY ANALYSIS WITH REGARD TO SCOPE, COST, BRIEF HISTORY, COVERAGE, AND ONLINE AVAILABILITY. THE COMPUTER-PRODUCED FORMAT AND THE INDEXES ARE DISCUSSED. AN ANALYSIS OF THE TOOL'S SYNOETIC STRUCTURE AND THE CHARACTERISTICS AND QUALITY OF THE ABSTRACTS IS INCLUDED, AS WELL AS A BRIEF COMPARATIVE ANALYSIS OF ENERGY ABSTRACTS FOR POLICY ANALYSIS, ERDA ENERGY RESEARCH ABSTRACTS, ENGINEERING INDEX ENERGY ABSTRACTS, AND ENERGY INFORMATION ABSTRACTS WITH REGARD TO SCOPE AND COVERAGE, COST, NUMBER OF ABSTRACTS, AND EMPHASIS. SMALL-SAMPLE QUANTITATIVE ANALYSES ON CORPORATE AUTHOR ENTRIES, GROWTH IN NUMBER OF ABSTRACTS, TIME LAG FOR PERIODICAL ARTICLES, AND COUNTRY OF ORIGIN OF ABSTRACTED JOURNALS COMPRISE THE FINAL SECTION. RECOMMENDATIONS FOR IMPROVEMENT OF THE TOOL ARE CITED. (AUTHOR/KP)

ACCESSION NUMBER: ED147108

CLEARINGHOUSE ACCESSION NUMBER: SE023258

PUBLICATION DATE: OCT 77

TITLE: ENERGY CONSIDERATIONS IN HOME MORTGAGES: AN EVALUATION TECHNIQUE.

INSTITUTION CODE: BBB15068

SPONSORING AGENCY CODE: RM066000

DESCRIPTOR: BUILDING DESIGN; CLIMATE CONTROL; ENERGY; *ENERGY CONSERVATION; *ENVIRONMENTAL EDUCATION; *FINANCIAL SUPPORT; *HOUSING; INVESTMENT; *LIFE CYCLE COSTING; *SOLAR RADIATION; THERMAL ENVIRONMENT; ENVIRONMENTAL ENERGY EDUCATION PROJECT

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 30P.; FOR RELATED DOCUMENTS, SEE SE 023 239, 370-371; NOT AVAILABLE IN HARD COPY DUE TO MARGINAL LEGIBILITY OF ORIGINAL DOCUMENT

ISSUE: RIEAPR78

ABSTRACT: THIS DOCUMENT, INTENDED PRIMARILY FOR MORTGAGE LENDERS, IS DESIGNED TO AID READERS IN EVALUATING SOLAR HEATING TECHNOLOGY IN THE ASPECTS OF ITS CAPITAL COST AND POTENTIAL FOR RECOVERY OF INVESTMENT, WHETHER OR NOT AMERICAN CONSUMERS WILL FULLY EXPLOIT THIS ALTERNATIVE WILL DEPEND UPON INTEREST RATES. THE ALLOCATION OF CAPITAL TO FINANCE THE HIGHER INITIAL COST OF SOLAR ENERGY DEVICES, AND THE WILLINGNESS OF LENDERS TO VENTURE INTO THIS NEW TECHNOLOGY. DISCUSSED ARE ENERGY COSTS AS A FACTOR OF CONVENTIONAL LOAN EVALUATION AND LIFE CYCLE COSTING. A CASE STUDY OF THE LATTER IS INCLUDED. A PROGRAM PROPOSAL FOR SOLAR HEATING LOANS IS DESCRIBED. (MA)

GRANT NUMBER: G007602036

BUREAU NUMBER: 522AH60802

INSTITUTION NAME: MAINE AUDUBON SOCIETY, FALMOUTH.

SPONSORING AGENCY NAME: OFFICE OF EDUCATION (DHEW), WASHINGTON, D.C.

ACCESSION NUMBER: ED147109

CLEARINGHOUSE ACCESSION NUMBER: SE023259

PUBLICATION DATE: SEP 77

TITLE: RETROFITTING: THE THERMAL UPGRADING OF BUILDINGS.

INSTITUTION CODE: BBB15068

SPONSORING AGENCY CODE: RM066000

DESCRIPTOR: *BUILDING DESIGN; BUILDING IMPROVEMENT; *CLIMATE CONTROL; DESIGN NEEDS; ENERGY; *ENERGY CONSERVATION; *ENVIRONMENTAL EDUCATION; SPEECHES; *THERMAL ENVIRONMENT; ENVIRONMENTAL ENERGY EDUCATION PROJECT

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 31P.; FOR RELATED DOCUMENTS, SEE SE 023 258, 370-371; FIGURES 1-5 REMOVED PRIOR TO BEING SHIPPED TO EDRS FOR FILMING DUE TO COPYRIGHT RESTRICTIONS; NOT AVAILABLE IN HARD COPY DUE TO MARGINAL LEGIBILITY OF ORIGINAL DOCUMENT

ISSUE: RIEAPR78

ABSTRACT: THIS PUBLICATION IS A COMPILATION OF TALKS DELIVERED DURING THE SPRING OF 1977 BY CHARLES WING. CONTENTS OF THE BOOKLET INCLUDE RETROFITTING OLD HOUSES, CONDENSATION AND VAPOR BARRIERS, SOLUTIONS TO THE VAPOR BARRIER PROBLEM, AND HOW MUCH OF WHICH INSULATION TO USE. THE PUBLICATION INCLUDES CHARTS, DRAWINGS, AND EQUATIONS TO ILLUSTRATE THE TOPICS BEING DISCUSSED. LIFE CYCLE COST ANALYSIS IS UTILIZED IN THE SECTION DEALING WITH DETERMINING THE AMOUNT OF INSULATION TO BE USED. (AUTHOR/MA)

GRANT NUMBER: G007602036

BUREAU NUMBER: 522AH60802

INSTITUTION NAME: MAINE AUDUBON SOCIETY, FALMOUTH.

SPONSORING AGENCY NAME: OFFICE OF EDUCATION (DHEW), WASHINGTON, D.C.

ACCESSION NUMBER: ED147114

CLEARINGHOUSE ACCESSION NUMBER: SE023292

PUBLICATION DATE: 77

TITLE: NATIONAL ENVIRONMENTAL/ENERGY WORKFORCE ASSESSMENT FOR ALABAMA.

INSTITUTION CODE: BBB15099

SPONSORING AGENCY CODE: BBB06039

DESCRIPTOR: AIR POLLUTION CONTROL; *CAREER OPPORTUNITIES; *EDUCATIONAL PROGRAMS; ENERGY; ENVIRONMENT; *MANPOWER NEEDS; PESTICIDES; *POLLUTION; POST SECONDARY EDUCATION; RADIATION; *STATE LEGISLATION; WATER POLLUTION CONTROL; *ALABAMA; NOISE; SOLID WASTES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$7.35 PLUS POSTAGE.

DESCRIPTIVE NOTE: 149P.; FOR RELATED DOCUMENTS, SEE SE 023 293-360; CONTAINS OCCASIONAL COLORED PAGES WHICH MAY NOT REPRODUCE WELL

ISSUE: RIEAPR78

ABSTRACT: THIS REPORT PRESENTS EXISTING WORKFORCE LEVELS, TRAINING PROGRAMS AND CAREER POTENTIALS AND DEVELOPS STAFFING LEVEL PROJECTIONS (1976-1982) BASED ON AVAILABLE INFORMATION FOR THE STATE OF ALABAMA. THE STUDY CONCERNS ITSELF WITH THE ENVIRONMENTAL POLLUTION CONTROL AREAS OF AIR, NOISE, POTABLE WATER, PESTICIDES, RADIATION, SOLID WASTE, WASTEWATER, AND ENERGY. THE FORMAT INCLUDES WORKFORCE PROFILES, PROJECTIONS, GROWTH AND CAREER OPTIONS FOR EACH OF THE AREAS INVESTIGATED. ADDITIONAL SECTIONS OF THE REPORT OUTLINE STATE LEGISLATION AND SELECTED POST SECONDARY INSTITUTIONS WITH FORMAL ENVIRONMENTAL/ENERGY PROGRAMS. A STATE PROFILE AND SUMMARY IS INCLUDED FOR CROSS-REFERENCE. THE SELECTED BIBLIOGRAPHY IS APPENDED IN THE REGION IV REPORT. THIS DOCUMENT IS ONE IN A SERIES OF 69 WHICH PRESENTS INFORMATION FOR EACH OF THE STATES, WASHINGTON, D.C., PUERTO RICO, AND THE VIRGIN ISLANDS, AND NATIONAL AND REGIONAL SUMMARIES. (CS)

GRANT NUMBER: EPA-T-900591010

INSTITUTION NAME: NATIONAL FIELD RESEARCH CENTER INC., IOWA CITY, IOWA.

SPONSORING AGENCY NAME: ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, D. C.

ACCESSION NUMBER: ED147115

CLEARINGHOUSE ACCESSION NUMBER: SE023293

PUBLICATION DATE: 77

TITLE: NATIONAL ENVIRONMENTAL/ENERGY WORKFORCE ASSESSMENT FOR ALASKA.

INSTITUTION CODE: BBB15099

SPONSORING AGENCY CODE: BBB06039

DESCRIPTOR: AIR POLLUTION CONTROL; *CAREER OPPORTUNITIES; *EDUCATIONAL PROGRAMS; ENERGY; ENVIRONMENT; *MANPOWER NEEDS; PESTICIDES; *POLLUTION; POST SECONDARY EDUCATION; RADIATION; *STATE LEGISLATION; WATER POLLUTION CONTROL; *ALASKA; NOISE; SOLID WASTES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$6.01 PLUS POSTAGE.

DESCRIPTIVE NOTE: 121P.; FOR RELATED DOCUMENTS, SEE SE 023 292-360; CONTAINS OCCASIONAL COLORED PAGES

ISSUE: RIEAPR78

ABSTRACT: THIS REPORT PRESENTS EXISTING WORKFORCE LEVELS, TRAINING PROGRAMS AND CAREER POTENTIALS AND DEVELOPS STAFFING LEVEL PROJECTIONS (1976-1982) BASED ON AVAILABLE INFORMATION FOR THE STATE OF ALASKA. THE STUDY CONCERNS ITSELF WITH THE ENVIRONMENTAL POLLUTION CONTROL AREAS OF AIR, NOISE, POTABLE WATER, PESTICIDES, RADIATION, SOLID WASTE, WASTEWATER, AND ENERGY. THE FORMAT INCLUDES WORKFORCE PROFILES, PROJECTIONS, GROWTH AND CAREER OPTIONS FOR EACH OF THE AREAS INVESTIGATED. ADDITIONAL SECTIONS OF THE REPORT OUTLINE STATE LEGISLATION AND SELECTED POST SECONDARY INSTITUTIONS WITH FORMAL ENVIRONMENTAL/ENERGY PROGRAMS. A STATE PROFILE AND SUMMARY IS INCLUDED FOR CROSS-REFERENCE. THE SELECTED BIBLIOGRAPHY IS APPENDED IN THE REGION X REPORT. THIS DOCUMENT IS ONE IN A SERIES OF 69 WHICH PRESENTS INFORMATION FOR EACH OF THE STATES, WASHINGTON, D.C., PUERTO RICO, AND THE VIRGIN ISLANDS, AND NATIONAL AND REGIONAL SUMMARIES. (CS)

GRANT NUMBER: EPA-T-900591010

INSTITUTION NAME: NATIONAL FIELD RESEARCH CENTER INC., IOWA CITY, IOWA.

SPONSORING AGENCY NAME: ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, D. C.

ACCESSION NUMBER: ED147116

CLEARINGHOUSE ACCESSION NUMBER: SE023294

PUBLICATION DATE: 77

TITLE: NATIONAL ENVIRONMENTAL/ENERGY WORKFORCE ASSESSMENT FOR ARIZONA.

INSTITUTION CODE: BBB15099

SPONSORING AGENCY CODE: BBB06039

DESCRIPTOR: AIR POLLUTION CONTROL; *CAREER OPPORTUNITIES; *EDUCATIONAL PROGRAMS; ENERGY; ENVIRONMENT; *MANPOWER NEEDS; PESTICIDES; *POLLUTION; POST SECONDARY EDUCATION; RADIATION; *STATE LEGISLATION; WATER POLLUTION CONTROL; *ARIZONA; NOISE; SOLID WASTES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$7.35 PLUS POSTAGE.

DESCRIPTIVE NOTE: 136P.; FOR RELATED DOCUMENTS, SEE SE 023 292-360; CONTAINS OCCASIONAL COLORED PAGES

ISSUE: RIEAPR78

ABSTRACT: THIS REPORT PRESENTS EXISTING WORKFORCE LEVELS, TRAINING PROGRAMS AND CAREER POTENTIALS AND DEVELOPS STAFFING LEVEL PROJECTIONS (1976-1982) BASED ON AVAILABLE INFORMATION FOR THE STATE OF ARIZONA. THE STUDY CONCERNS ITSELF WITH THE ENVIRONMENTAL POLLUTION CONTROL AREAS OF AIR, NOISE, POTABLE WATER, PESTICIDES, RADIATION, SOLID WASTE, WASTEWATER, AND ENERGY. THE FORMAT INCLUDES WORKFORCE PROFILES, PROJECTIONS, GROWTH AND CAREER OPTIONS FOR EACH OF THE AREAS INVESTIGATED. ADDITIONAL SECTIONS OF THE REPORT OUTLINE STATE LEGISLATION AND SELECTED POST SECONDARY INSTITUTIONS WITH FORMAL ENVIRONMENTAL/ENERGY PROGRAMS. A STATE PROFILE AND SUMMARY IS INCLUDED FOR CROSS-REFERENCE. THE SELECTED BIBLIOGRAPHY IS APPENDED IN THE REGION IX REPORT. THIS DOCUMENT IS ONE IN A SERIES OF 69 WHICH PRESENTS INFORMATION FOR EACH OF THE STATES, WASHINGTON, D.C., PUERTO RICO, AND THE VIRGIN ISLANDS, AND NATIONAL AND REGIONAL SUMMARIES. (CS)

GRANT NUMBER: EPA-T-900591010

INSTITUTION NAME: NATIONAL FIELD RESEARCH CENTER INC., IOWA CITY, IOWA.

SPONSORING AGENCY NAME: ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, D. C.

ACCESSION NUMBER: ED147117

CLEARINGHOUSE ACCESSION NUMBER: SE023295

PUBLICATION DATE: 77

TITLE: NATIONAL ENVIRONMENTAL/ENERGY WORKFORCE ASSESSMENT FOR ARKANSAS.

INSTITUTION CODE: BBB15099

SPONSORING AGENCY CODE: BBB06039

DESCRIPTOR: AIR POLLUTION CONTROL; *CAREER OPPORTUNITIES; *EDUCATIONAL PROGRAMS; ENERGY; ENVIRONMENT; *MANPOWER NEEDS; PESTICIDES; *POLLUTION; POST SECONDARY EDUCATION; RADIATION; *STATE LEGISLATION; WATER POLLUTION CONTROL; *ARKANSAS; NOISE; SOLID WASTES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$6.01 PLUS POSTAGE.

DESCRIPTIVE NOTE: 109P.; FOR RELATED DOCUMENTS, SEE SE 023 292-360; CONTAINS OCCASIONAL COLORED PAGES AND SMALL PRINT

ISSUE: RIEAPR78

ABSTRACT: THIS REPORT PRESENTS EXISTING WORKFORCE LEVELS, TRAINING PROGRAMS AND CAREER POTENTIALS AND DEVELOPS STAFFING LEVEL PROJECTIONS (1976-1982) BASED ON AVAILABLE INFORMATION FOR THE STATE OF ARKANSAS. THE STUDY CONCERNS ITSELF WITH THE ENVIRONMENTAL POLLUTION CONTROL AREAS OF AIR, NOISE, POTABLE WATER, PESTICIDES, RADIATION, SOLID WASTE, WASTEWATER, AND ENERGY. THE FORMAT INCLUDES WORKFORCE PROFILES, PROJECTIONS, GROWTH AND CAREER OPTIONS FOR EACH OF THE AREAS INVESTIGATED. ADDITIONAL SECTIONS OF THE REPORT OUTLINE STATE LEGISLATION AND SELECTED POST SECONDARY INSTITUTIONS WITH FORMAL ENVIRONMENTAL/ENERGY PROGRAMS. A STATE PROFILE AND SUMMARY IS INCLUDED FOR CROSS-REFERENCE. THE SELECTED BIBLIOGRAPHY IS APPENDED IN THE REGION VI REPORT. THIS DOCUMENT IS ONE IN A SERIES OF 69 WHICH PRESENTS INFORMATION FOR EACH OF THE STATES, WASHINGTON, D.C., PUERTO RICO, AND THE VIRGIN ISLANDS, AND NATIONAL AND REGIONAL SUMMARIES. (CS)

GRANT NUMBER: EPA-T-900591010

INSTITUTION NAME: NATIONAL FIELD RESEARCH CENTER INC., IOWA CITY, IOWA.

SPONSORING AGENCY NAME: ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, D. C.

ACCESSION NUMBER: ED147118

CLEARINGHOUSE ACCESSION NUMBER: SE023296

PUBLICATION DATE: 77

TITLE: NATIONAL ENVIRONMENTAL/ENERGY WORKFORCE ASSESSMENT FOR CALIFORNIA.

INSTITUTION CODE: BBB15099

SPONSORING AGENCY CODE: BBB06039

DESCRIPTOR: AIR POLLUTION CONTROL; *CAREER OPPORTUNITIES; *EDUCATIONAL PROGRAMS; ENERGY; ENVIRONMENT; *MANPOWER NEEDS; PESTICIDES; *POLLUTION; POST SECONDARY EDUCATION; RADIATION; *STATE LEGISLATION; WATER POLLUTION CONTROL; *CALIFORNIA; NOISE; SOLID WASTES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$10.03 PLUS POSTAGE.

DESCRIPTIVE NOTE: 183P.; FOR RELATED DOCUMENTS, SEE SE 023 292-360; CONTAINS OCCASIONAL COLORED PAGES AND SMALL PRINT

ISSUE: RIEAPR78

ABSTRACT: THIS REPORT PRESENTS EXISTING WORKFORCE LEVELS, TRAINING PROGRAMS AND CAREER POTENTIALS AND DEVELOPS STAFFING LEVEL PROJECTIONS (1976-1982) BASED ON AVAILABLE INFORMATION FOR THE STATE OF CALIFORNIA. THE STUDY CONCERNS ITSELF WITH THE ENVIRONMENTAL POLLUTION CONTROL AREAS OF AIR, NOISE, POTABLE WATER, PESTICIDES, RADIATION, SOLID WASTE, WASTEWATER, AND ENERGY. THE FORMAT INCLUDES WORKFORCE PROFILES, PROJECTIONS, GROWTH AND CAREER OPTIONS FOR EACH OF THE AREAS INVESTIGATED. ADDITIONAL SECTIONS OF THE REPORT OUTLINE STATE LEGISLATION AND SELECTED POST SECONDARY INSTITUTIONS WITH FORMAL ENVIRONMENTAL/ENERGY PROGRAMS. A STATE PROFILE AND SUMMARY IS INCLUDED FOR CROSS-REFERENCE. THE SELECTED BIBLIOGRAPHY IS APPENDED IN THE REGION IX REPORT. THIS DOCUMENT IS ONE IN A SERIES OF 69 WHICH PRESENTS INFORMATION FOR EACH OF THE STATES, WASHINGTON, D.C., PUERTO RICO, AND THE VIRGIN ISLANDS, AND NATIONAL AND REGIONAL SUMMARIES. (CS)

GRANT NUMBER: EPA-T-900591010

INSTITUTION NAME: NATIONAL FIELD RESEARCH CENTER INC., IOWA CITY, IOWA.

SPONSORING AGENCY NAME: ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, D. C.

ACCESSION NUMBER: ED147119

CLEARINGHOUSE ACCESSION NUMBER: SE023297

PUBLICATION DATE: 77

TITLE: NATIONAL ENVIRONMENTAL/ENERGY WORKFORCE ASSESSMENT FOR COLORADO.

INSTITUTION CODE: BBB15099

SPONSORING AGENCY CODE: BBB06039

DESCRIPTOR: AIR POLLUTION CONTROL; *CAREER OPPORTUNITIES; *EDUCATIONAL PROGRAMS; ENERGY; ENVIRONMENT; *MANPOWER NEEDS; PESTICIDES; *POLLUTION; POST SECONDARY EDUCATION; RADIATION; *STATE LEGISLATION; WATER POLLUTION CONTROL; *COLORADO; NOISE; SOLID WASTES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$6.01 PLUS POSTAGE.

DESCRIPTIVE NOTE: 117P.; FOR RELATED DOCUMENTS, SEE SE 023 292-360; CONTAINS OCCASIONAL COLORED PAGES AND SMALL PRINT

ISSUE: RIEAPR78

ABSTRACT: THIS REPORT PRESENTS EXISTING WORKFORCE LEVELS, TRAINING PROGRAMS AND CAREER POTENTIALS AND DEVELOPS STAFFING LEVEL PROJECTIONS (1976-1982) BASED ON AVAILABLE INFORMATION FOR THE STATE OF COLORADO. THE STUDY CONCERNS ITSELF WITH THE ENVIRONMENTAL POLLUTION CONTROL AREAS OF AIR, NOISE, POTABLE WATER, PESTICIDES, RADIATION, SOLID WASTE, WASTEWATER, AND ENERGY. THE FORMAT INCLUDES WORKFORCE PROFILES, PROJECTIONS, GROWTH AND CAREER OPTIONS FOR EACH OF THE AREAS INVESTIGATED. ADDITIONAL SECTIONS OF THE REPORT OUTLINE STATE LEGISLATION AND SELECTED POST SECONDARY INSTITUTIONS WITH FORMAL ENVIRONMENTAL/ENERGY PROGRAMS. A STATE PROFILE AND SUMMARY IS INCLUDED FOR CROSS-REFERENCE. THE SELECTED BIBLIOGRAPHY IS APPENDED IN THE REGION VIII REPORT. THIS DOCUMENT IS ONE IN A SERIES OF 69 WHICH PRESENTS INFORMATION FOR EACH OF THE STATES, WASHINGTON, D.C., PUERTO RICO, AND THE VIRGIN ISLANDS, AND NATIONAL AND REGIONAL SUMMARIES. (CS)

GRANT NUMBER: EPA-T-900591010

INSTITUTION NAME: NATIONAL FIELD RESEARCH CENTER INC., IOWA CITY, IOWA.

SPONSORING AGENCY NAME: ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, D. C.

ACCESSION NUMBER: ED147120

CLEARINGHOUSE ACCESSION NUMBER: SE023298

PUBLICATION DATE: 77

TITLE: NATIONAL ENVIRONMENTAL/ENERGY WORKFORCE ASSESSMENT FOR CONNECTICUT.

INSTITUTION CODE: BBB15099

SPONSORING AGENCY CODE: BBB06039

DESCRIPTOR: AIR POLLUTION CONTROL; *CAREER OPPORTUNITIES; *EDUCATIONAL PROGRAMS; ENERGY; ENVIRONMENT; *MANPOWER NEEDS; PESTICIDES; *POLLUTION; POST SECONDARY EDUCATION; RADIATION; *STATE LEGISLATION; WATER POLLUTION CONTROL; *CONNECTICUT; NOISE; SOLID WASTES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$6.01 PLUS POSTAGE.

DESCRIPTIVE NOTE: 117P.; FOR RELATED DOCUMENTS, SEE SE 023 292-360; CONTAINS OCCASIONAL COLORED PAGES

ISSUE: RIEAPR78

ABSTRACT: THIS REPORT PRESENTS EXISTING WORKFORCE LEVELS, TRAINING PROGRAMS AND CAREER POTENTIALS AND DEVELOPS STAFFING LEVEL PROJECTIONS (1976-1982) BASED ON AVAILABLE INFORMATION FOR THE STATE OF CONNECTICUT. THE STUDY CONCERNS ITSELF WITH THE ENVIRONMENTAL POLLUTION CONTROL AREAS OF AIR, NOISE, POTABLE WATER, PESTICIDES, RADIATION, SOLID WASTE, WASTEWATER, AND ENERGY. THE FORMAT INCLUDES WORKFORCE PROFILES, PROJECTIONS, GROWTH AND CAREER OPTIONS FOR EACH OF THE AREAS INVESTIGATED. ADDITIONAL SECTIONS OF THE REPORT OUTLINE STATE LEGISLATION AND SELECTED POST SECONDARY INSTITUTIONS WITH FORMAL ENVIRONMENTAL/ENERGY PROGRAMS. A STATE PROFILE AND SUMMARY IS INCLUDED FOR CROSS-REFERENCE. THE SELECTED BIBLIOGRAPHY IS APPENDED IN THE REGION I REPORT. THIS DOCUMENT IS ONE IN A SERIES OF 69 WHICH PRESENTS INFORMATION FOR EACH OF THE STATES, WASHINGTON,

D.C., PUERTO RICO, AND THE VIRGIN ISLANDS, AND NATIONAL AND REGIONAL SUMMARIES. (CS)

GRANT NUMBER: EPA-T-900591010

INSTITUTION NAME: NATIONAL FIELD RESEARCH CENTER INC., IOWA CITY, IOWA.

SPONSORING AGENCY NAME: ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, D. C.

ACCESSION NUMBER: ED147121

CLEARINGHOUSE ACCESSION NUMBER: SE023299

PUBLICATION DATE: 77

TITLE: NATIONAL ENVIRONMENTAL/ENERGY WORKFORCE ASSESSMENT FOR DELAWARE.

INSTITUTION CODE: 88815099

SPONSORING AGENCY CODE: 88806039

DESCRIPTOR: AIR POLLUTION CONTROL; *CAREER OPPORTUNITIES; *EDUCATIONAL PROGRAMS; ENERGY; ENVIRONMENT; *MANPOWER NEEDS; PESTICIDES; *POLLUTION; POST SECONDARY EDUCATION; RADIATION; *STATE LEGISLATION; WATER POLLUTION CONTROL; *DELAWARE; NOISE; SOLID WASTES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$4.67 PLUS POSTAGE.

DESCRIPTIVE NOTE: 96P.; FOR RELATED DOCUMENTS, SEE SE 023 292-360; CONTAINS OCCASIONAL COLORED PAGES

ISSUE: R1EAPR78

ABSTRACT: THIS REPORT PRESENTS EXISTING WORKFORCE LEVELS, TRAINING PROGRAMS AND CAREER POTENTIALS AND DEVELOPS STAFFING LEVEL PROJECTIONS (1976-1982) BASED ON AVAILABLE INFORMATION FOR THE STATE OF DELAWARE. THE STUDY CONCERNS ITSELF WITH THE ENVIRONMENTAL POLLUTION CONTROL AREAS OF AIR, NOISE, POTABLE WATER, PESTICIDES, RADIATION, SOLID WASTE, WASTEWATER, AND ENERGY. THE FORMAT INCLUDES WORKFORCE PROFILES, PROJECTIONS, GROWTH AND CAREER OPTIONS FOR EACH OF THE AREAS INVESTIGATED. ADDITIONAL SECTIONS OF THE REPORT OUTLINE STATE LEGISLATION AND SELECTED POST SECONDARY INSTITUTIONS WITH FORMAL ENVIRONMENTAL/ENERGY PROGRAMS. A STATE PROFILE AND SUMMARY IS INCLUDED FOR CROSS-REFERENCE. THE SELECTED BIBLIOGRAPHY IS APPENDED IN THE REGION III REPORT. THIS DOCUMENT IS ONE IN A SERIES OF 69 WHICH PRESENTS INFORMATION FOR EACH OF THE STATES, WASHINGTON, D.C., PUERTO RICO, AND THE VIRGIN ISLANDS, AND NATIONAL AND REGIONAL SUMMARIES. (CS)

GRANT NUMBER: EPA-T-900591010

INSTITUTION NAME: NATIONAL FIELD RESEARCH CENTER INC., IOWA CITY, IOWA.

SPONSORING AGENCY NAME: ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, D. C.

ACCESSION NUMBER: ED147122

CLEARINGHOUSE ACCESSION NUMBER: SE023300

PUBLICATION DATE: 77

TITLE: NATIONAL ENVIRONMENTAL/ENERGY WORKFORCE ASSESSMENT FOR DISTRICT OF COLUMBIA.

INSTITUTION CODE: 88815099

SPONSORING AGENCY CODE: 88806039

DESCRIPTOR: AIR POLLUTION CONTROL; *CAREER OPPORTUNITIES; *EDUCATIONAL PROGRAMS; ENERGY; ENVIRONMENT; *MANPOWER NEEDS; PESTICIDES; *POLLUTION; POST SECONDARY EDUCATION; RADIATION; *STATE LEGISLATION; WATER POLLUTION CONTROL; *DISTRICT OF COLUMBIA; NOISE; SOLID WASTES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$4.67 PLUS POSTAGE.

DESCRIPTIVE NOTE: 93P.; FOR RELATED DOCUMENTS, SEE SE 023 292-360; CONTAINS OCCASIONAL COLORED PAGES

ISSUE: R1EAPR78

ABSTRACT: THIS REPORT PRESENTS EXISTING WORKFORCE LEVELS, TRAINING PROGRAMS AND CAREER POTENTIALS AND DEVELOPS STAFFING LEVEL PROJECTIONS (1976-1982) BASED ON AVAILABLE INFORMATION FOR THE DISTRICT OF COLUMBIA. THE STUDY CONCERNS ITSELF WITH THE ENVIRONMENTAL POLLUTION CONTROL AREAS OF AIR, NOISE, POTABLE WATER, PESTICIDES, RADIATION, SOLID WASTE, WASTEWATER, AND ENERGY. THE FORMAT INCLUDES WORKFORCE PROFILES, PROJECTIONS, GROWTH AND CAREER OPTIONS FOR EACH OF THE AREAS INVESTIGATED. ADDITIONAL SECTIONS OF THE REPORT OUTLINE STATE LEGISLATION AND SELECTED POST SECONDARY INSTITUTIONS WITH FORMAL ENVIRONMENTAL/ENERGY PROGRAMS. A STATE PROFILE AND SUMMARY IS INCLUDED FOR CROSS-REFERENCE. THE SELECTED BIBLIOGRAPHY IS APPENDED IN THE REGION III REPORT. THIS DOCUMENT IS ONE IN A SERIES OF 69 WHICH PRESENTS INFORMATION FOR EACH OF THE STATES, PUERTO RICO, AND THE VIRGIN ISLANDS, AND NATIONAL AND REGIONAL SUMMARIES. (CS)

GRANT NUMBER: EPA-T-900591010

INSTITUTION NAME: NATIONAL FIELD RESEARCH CENTER INC., IOWA CITY, IOWA.

SPONSORING AGENCY NAME: ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, D. C.

ACCESSION NUMBER: ED147123

CLEARINGHOUSE ACCESSION NUMBER: SE023301

PUBLICATION DATE: 77

TITLE: NATIONAL ENVIRONMENTAL/ENERGY WORKFORCE ASSESSMENT FOR FLORIDA.

INSTITUTION CODE: 88815099

SPONSORING AGENCY CODE: 88806039

DESCRIPTOR: AIR POLLUTION CONTROL; *CAREER OPPORTUNITIES; *EDUCATIONAL PROGRAMS; ENERGY; ENVIRONMENT; *MANPOWER NEEDS; PESTICIDES; *POLLUTION; POST SECONDARY EDUCATION; RADIATION; *STATE LEGISLATION; WATER POLLUTION CONTROL; *FLORIDA; NOISE; SOLID WASTES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$8.69 PLUS POSTAGE.

DESCRIPTIVE NOTE: 137P.; FOR RELATED DOCUMENTS, SEE SE 023 292-360; CONTAINS OCCASIONAL COLORED PAGES

ISSUE: R1EAPR78

ABSTRACT: THIS REPORT PRESENTS EXISTING WORKFORCE LEVELS, TRAINING PROGRAMS AND CAREER POTENTIALS AND DEVELOPS STAFFING LEVEL PROJECTIONS (1976-1982) BASED ON AVAILABLE INFORMATION FOR THE STATE OF FLORIDA. THE STUDY CONCERNS ITSELF WITH THE ENVIRONMENTAL POLLUTION CONTROL AREAS OF AIR, NOISE, POTABLE WATER, PESTICIDES, RADIATION, SOLID WASTE, WASTEWATER, AND ENERGY. THE FORMAT INCLUDES WORKFORCE PROFILES, PROJECTIONS, GROWTH AND CAREER OPTIONS FOR EACH OF THE AREAS INVESTIGATED. ADDITIONAL SECTIONS OF THE REPORT OUTLINE STATE LEGISLATION AND SELECTED POST SECONDARY INSTITUTIONS WITH FORMAL ENVIRONMENTAL/ENERGY PROGRAMS. A STATE PROFILE AND SUMMARY IS INCLUDED FOR CROSS-REFERENCE. THE SELECTED BIBLIOGRAPHY IS APPENDED IN THE REGION IV REPORT. THIS DOCUMENT IS ONE IN A SERIES OF 69 WHICH PRESENTS INFORMATION FOR EACH OF THE STATES, WASHINGTON, D.C., PUERTO RICO, AND THE VIRGIN ISLANDS, AND NATIONAL AND REGIONAL SUMMARIES. (CS)

GRANT NUMBER: EPA-T-900591010

INSTITUTION NAME: NATIONAL FIELD RESEARCH CENTER INC., IOWA CITY, IOWA.

SPONSORING AGENCY NAME: ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, D. C.

ACCESSION NUMBER: ED147124

CLEARINGHOUSE ACCESSION NUMBER: SE023302

PUBLICATION DATE: 77

TITLE: NATIONAL ENVIRONMENTAL/ENERGY WORKFORCE ASSESSMENT FOR GEORGIA.

INSTITUTION CODE: 88815099

SPONSORING AGENCY CODE: 88806039

DESCRIPTOR: AIR POLLUTION CONTROL; *CAREER OPPORTUNITIES; *EDUCATIONAL PROGRAMS; ENERGY; ENVIRONMENT; *MANPOWER NEEDS; PESTICIDES; *POLLUTION; POST SECONDARY EDUCATION; RADIATION; *STATE LEGISLATION; WATER POLLUTION CONTROL; *GEORGIA; NOISE; SOLID WASTES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$10.03 PLUS POSTAGE.

DESCRIPTIVE NOTE: 184P.; FOR RELATED DOCUMENTS, SEE SE 023 292-360; CONTAINS OCCASIONAL COLORED PAGES

ISSUE: R1EAPR78

ABSTRACT: THIS REPORT PRESENTS EXISTING WORKFORCE LEVELS, TRAINING PROGRAMS AND CAREER POTENTIALS AND DEVELOPS STAFFING LEVEL PROJECTIONS (1976-1982) BASED ON AVAILABLE INFORMATION FOR THE STATE OF GEORGIA. THE STUDY CONCERNS ITSELF WITH THE ENVIRONMENTAL POLLUTION CONTROL AREAS OF AIR, NOISE, POTABLE WATER, PESTICIDES, RADIATION, SOLID WASTE, WASTEWATER, AND ENERGY. THE FORMAT INCLUDES WORKFORCE PROFILES, PROJECTIONS, GROWTH AND CAREER OPTIONS FOR EACH OF THE AREAS INVESTIGATED. ADDITIONAL SECTIONS OF THE REPORT OUTLINE STATE LEGISLATION AND SELECTED POST SECONDARY INSTITUTIONS WITH FORMAL ENVIRONMENTAL/ENERGY PROGRAMS. A STATE PROFILE AND SUMMARY IS INCLUDED FOR CROSS-REFERENCE. THE SELECTED BIBLIOGRAPHY IS APPENDED IN THE REGION IV REPORT. THIS DOCUMENT IS ONE IN A SERIES OF 69 WHICH PRESENTS INFORMATION FOR EACH OF THE STATES, WASHINGTON, D.C., PUERTO RICO, AND THE VIRGIN ISLANDS, AND NATIONAL AND REGIONAL SUMMARIES. (CS)

GRANT NUMBER: EPA-T-900591010

INSTITUTION NAME: NATIONAL FIELD RESEARCH CENTER INC., IOWA CITY, IOWA.

SPONSORING AGENCY NAME: ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, D. C.

ACCESSION NUMBER: ED147125

CLEARINGHOUSE ACCESSION NUMBER: SE023303

PUBLICATION DATE: 77

TITLE: NATIONAL ENVIRONMENTAL/ENERGY WORKFORCE ASSESSMENT FOR HAWAII.

INSTITUTION CODE: 88815099

SPONSORING AGENCY CODE: 88806039

DESCRIPTOR: AIR POLLUTION CONTROL; *CAREER OPPORTUNITIES; *EDUCATIONAL PROGRAMS; ENERGY; ENVIRONMENT; *MANPOWER NEEDS; PESTICIDES; *POLLUTION; POST SECONDARY EDUCATION; RADIATION; *STATE LEGISLATION; WATER POLLUTION CONTROL; *HAWAII; NOISE; SOLID WASTES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$4.67 PLUS POSTAGE.

DESCRIPTIVE NOTE: 96P.; FOR RELATED DOCUMENTS, SEE SE 023 292-360; CONTAINS OCCASIONAL COLORED PAGES

ISSUE: R1EAPR78

ABSTRACT: THIS REPORT PRESENTS EXISTING WORKFORCE LEVELS,

TRAINING PROGRAMS AND CAREER POTENTIALS AND DEVELOPS STAFFING LEVEL PROJECTIONS (1976-1982) BASED ON AVAILABLE INFORMATION FOR THE STATE OF HAWAII. THE STUDY CONCERNS ITSELF WITH THE ENVIRONMENTAL POLLUTION CONTROL AREAS OF AIR, NOISE, POTABLE WATER, PESTICIDES, RADIATION, SOLID WASTE, WASTEWATER, AND ENERGY. THE FORMAT INCLUDES WORKFORCE PROFILES, PROJECTIONS, GROWTH AND CAREER OPTIONS FOR EACH OF THE AREAS INVESTIGATED. ADDITIONAL SECTIONS OF THE REPORT OUTLINE STATE LEGISLATION AND SELECTED POST SECONDARY INSTITUTIONS WITH FORMAL ENVIRONMENTAL/ENERGY PROGRAMS. A STATE PROFILE AND SUMMARY IS INCLUDED FOR CROSS-REFERENCE. THE SELECTED BIBLIOGRAPHY IS APPENDED IN THE REGION IX REPORT. THIS DOCUMENT IS ONE IN A SERIES OF 69 WHICH PRESENTS INFORMATION FOR EACH OF THE STATES, WASHINGTON, D.C., PUERTO RICO, AND THE VIRGIN ISLANDS, AND NATIONAL AND REGIONAL SUMMARIES. (CS)

GRANT NUMBER: EPA-T-900591010

INSTITUTION NAME: NATIONAL FIELD RESEARCH CENTER INC., IOWA CITY, IOWA.

SPONSORING AGENCY NAME: ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, D. C.

ACCESSION NUMBER: ED147126

CLEARINGHOUSE ACCESSION NUMBER: SE023304

PUBLICATION DATE: 77

TITLE: NATIONAL ENVIRONMENTAL/ENERGY WORKFORCE ASSESSMENT FOR IDAHO.

INSTITUTION CODE: 88815099

SPONSORING AGENCY CODE: 88806039

DESCRIPTOR: AIR POLLUTION CONTROL; *CAREER OPPORTUNITIES; *EDUCATIONAL PROGRAMS; ENERGY; ENVIRONMENT; *MANPOWER NEEDS; PESTICIDES; *POLLUTION; POST SECONDARY EDUCATION; RADIATION; *STATE LEGISLATION; WATER POLLUTION CONTROL; *IDAHO; NOISE; SOLID WASTES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$6.01 PLUS POSTAGE.

DESCRIPTIVE NOTE: 109P.; FOR RELATED DOCUMENTS, SEE SE 023 292-360; CONTAINS OCCASIONAL COLORED PAGES

ISSUE: R1EAPR78

ABSTRACT: THIS REPORT PRESENTS EXISTING WORKFORCE LEVELS, TRAINING PROGRAMS AND CAREER POTENTIALS AND DEVELOPS STAFFING LEVEL PROJECTIONS (1976-1982) BASED ON AVAILABLE INFORMATION FOR THE STATE OF IDAHO. THE STUDY CONCERNS ITSELF WITH THE ENVIRONMENTAL POLLUTION CONTROL AREAS OF AIR, NOISE, POTABLE WATER, PESTICIDES, RADIATION, SOLID WASTE, WASTEWATER, AND ENERGY. THE FORMAT INCLUDES WORKFORCE PROFILES, PROJECTIONS, GROWTH AND CAREER OPTIONS FOR EACH OF THE AREAS INVESTIGATED. ADDITIONAL SECTIONS OF THE REPORT OUTLINE STATE LEGISLATION AND SELECTED POST SECONDARY INSTITUTIONS WITH FORMAL ENVIRONMENTAL/ENERGY PROGRAMS. A STATE PROFILE AND SUMMARY IS INCLUDED FOR CROSS-REFERENCE. THE SELECTED BIBLIOGRAPHY IS APPENDED IN THE REGION X REPORT. THIS DOCUMENT IS ONE IN A SERIES OF 69 WHICH PRESENTS INFORMATION FOR EACH OF THE STATES, WASHINGTON, D.C., PUERTO RICO, AND THE VIRGIN ISLANDS, AND NATIONAL AND REGIONAL SUMMARIES. (CS)

GRANT NUMBER: EPA-T-900591010

INSTITUTION NAME: NATIONAL FIELD RESEARCH CENTER INC., IOWA CITY, IOWA.

SPONSORING AGENCY NAME: ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, D. C.

ACCESSION NUMBER: ED147127

CLEARINGHOUSE ACCESSION NUMBER: SE023305

PUBLICATION DATE: 77

TITLE: NATIONAL ENVIRONMENTAL/ENERGY WORKFORCE ASSESSMENT FOR ILLINOIS.

INSTITUTION CODE: 88815099

SPONSORING AGENCY CODE: 88806039

DESCRIPTOR: AIR POLLUTION CONTROL; *CAREER OPPORTUNITIES; *EDUCATIONAL PROGRAMS; ENERGY; ENVIRONMENT; *MANPOWER NEEDS; PESTICIDES; *POLLUTION; POST SECONDARY EDUCATION; RADIATION; *STATE LEGISLATION; WATER POLLUTION CONTROL; *ILLINOIS; NOISE; SOLID WASTES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$10.03 PLUS POSTAGE.

DESCRIPTIVE NOTE: 184P.; FOR RELATED DOCUMENTS, SEE SE 023 292-360; CONTAINS OCCASIONAL COLORED PAGES ; SEVERAL FIGURES MAY BE MARGINALLY LEGIBLE

ISSUE: R1EAPR78

ABSTRACT: THIS REPORT PRESENTS EXISTING WORKFORCE LEVELS, TRAINING PROGRAMS AND CAREER POTENTIALS AND DEVELOPS STAFFING LEVEL PROJECTIONS (1976-1982) BASED ON AVAILABLE INFORMATION FOR THE STATE OF ILLINOIS. THE STUDY CONCERNS ITSELF WITH THE ENVIRONMENTAL POLLUTION CONTROL AREAS OF AIR, NOISE, POTABLE WATER, PESTICIDES, RADIATION, SOLID WASTE, WASTEWATER, AND ENERGY. THE FORMAT INCLUDES WORKFORCE PROFILES, PROJECTIONS, GROWTH AND CAREER OPTIONS FOR EACH OF THE AREAS INVESTIGATED. ADDITIONAL SECTIONS OF THE REPORT OUTLINE STATE LEGISLATION AND SELECTED POST SECONDARY INSTITUTIONS WITH FORMAL ENVIRONMENTAL/ENERGY PROGRAMS. A STATE PROFILE AND SUMMARY IS INCLUDED FOR CROSS-REFERENCE. THE SELECTED BIBLIOGRAPHY IS APPENDED IN THE REGION V REPORT. THIS DOCUMENT IS ONE IN A SERIES OF 69 WHICH PRESENTS INFORMATION FOR EACH OF THE STATES, WASHINGTON, D.C., PUERTO RICO, AND THE VIRGIN ISLANDS, AND NATIONAL AND REGIONAL SUMMARIES. (CS)

GRANT NUMBER: EPA-T-900591010

INSTITUTION NAME: NATIONAL FIELD RESEARCH CENTER INC., IOWA CITY, IOWA.

SPONSORING AGENCY NAME: ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, D. C.

ACCESSION NUMBER: ED147128

CLEARINGHOUSE ACCESSION NUMBER: SE023306

PUBLICATION DATE: 77

TITLE: NATIONAL ENVIRONMENTAL/ENERGY WORKFORCE ASSESSMENT FOR INDIANA.

INSTITUTION CODE: 88815099

SPONSORING AGENCY CODE: 88806039

DESCRIPTOR: AIR POLLUTION CONTROL; *CAREER OPPORTUNITIES; *EDUCATIONAL PROGRAMS; ENERGY; ENVIRONMENT; *MANPOWER NEEDS; PESTICIDES; *POLLUTION; POST SECONDARY EDUCATION; RADIATION; *STATE LEGISLATION; WATER POLLUTION CONTROL; *INDIANA; NOISE; SOLID WASTES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$11.37 PLUS POSTAGE.

DESCRIPTIVE NOTE: 208P.; FOR RELATED DOCUMENTS, SEE SE 023 292-360; CONTAINS OCCASIONAL COLORED PAGES; APPENDICES MARGINALLY LEGIBLE

ISSUE: R1EAPR78

ABSTRACT: THIS REPORT PRESENTS EXISTING WORKFORCE LEVELS, TRAINING PROGRAMS AND CAREER POTENTIALS AND DEVELOPS STAFFING LEVEL PROJECTIONS (1976-1982) BASED ON AVAILABLE INFORMATION FOR THE STATE OF INDIANA. THE STUDY CONCERNS ITSELF WITH THE ENVIRONMENTAL POLLUTION CONTROL AREAS OF AIR, NOISE, POTABLE WATER, PESTICIDES, RADIATION, SOLID WASTE, WASTEWATER, AND ENERGY. THE FORMAT INCLUDES WORKFORCE PROFILES, PROJECTIONS, GROWTH AND CAREER OPTIONS FOR EACH OF THE AREAS INVESTIGATED. ADDITIONAL SECTIONS OF THE REPORT OUTLINE STATE LEGISLATION AND SELECTED POST SECONDARY INSTITUTIONS WITH FORMAL ENVIRONMENTAL/ENERGY PROGRAMS. A STATE PROFILE AND SUMMARY IS INCLUDED FOR CROSS-REFERENCE. THE SELECTED BIBLIOGRAPHY IS APPENDED IN THE REGION V REPORT. THIS DOCUMENT IS ONE IN A SERIES OF 69 WHICH PRESENTS INFORMATION FOR EACH OF THE STATES, WASHINGTON, D.C., PUERTO RICO, AND THE VIRGIN ISLANDS, AND NATIONAL AND REGIONAL SUMMARIES. (CS)

GRANT NUMBER: EPA-T-900591010

INSTITUTION NAME: NATIONAL FIELD RESEARCH CENTER INC., IOWA CITY, IOWA.

SPONSORING AGENCY NAME: ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, D. C.

ACCESSION NUMBER: ED147129

CLEARINGHOUSE ACCESSION NUMBER: SE023307

PUBLICATION DATE: 77

TITLE: NATIONAL ENVIRONMENTAL/ENERGY WORKFORCE ASSESSMENT FOR IOWA.

INSTITUTION CODE: 88815099

SPONSORING AGENCY CODE: 88806039

DESCRIPTOR: AIR POLLUTION CONTROL; *CAREER OPPORTUNITIES; *EDUCATIONAL PROGRAMS; ENERGY; ENVIRONMENT; *MANPOWER NEEDS; PESTICIDES; *POLLUTION; POST SECONDARY EDUCATION; RADIATION; *STATE LEGISLATION; WATER POLLUTION CONTROL; *IOWA; NOISE; SOLID WASTES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$6.61 PLUS POSTAGE.

DESCRIPTIVE NOTE: 108P.; FOR RELATED DOCUMENTS, SEE SE 023 292-360; CONTAINS OCCASIONAL COLORED PAGES

ISSUE: R1EAPR78

ABSTRACT: THIS REPORT PRESENTS EXISTING WORKFORCE LEVELS, TRAINING PROGRAMS AND CAREER POTENTIALS AND DEVELOPS STAFFING LEVEL PROJECTIONS (1976-1982) BASED ON AVAILABLE INFORMATION FOR THE STATE OF IOWA. THE STUDY CONCERNS ITSELF WITH THE ENVIRONMENTAL POLLUTION CONTROL AREAS OF AIR, NOISE, POTABLE WATER, PESTICIDES, RADIATION, SOLID WASTE, WASTEWATER, AND ENERGY. THE FORMAT INCLUDES WORKFORCE PROFILES, PROJECTIONS, GROWTH AND CAREER OPTIONS FOR EACH OF THE AREAS INVESTIGATED. ADDITIONAL SECTIONS OF THE REPORT OUTLINE STATE LEGISLATION AND SELECTED POST SECONDARY INSTITUTIONS WITH FORMAL ENVIRONMENTAL/ENERGY PROGRAMS. A STATE PROFILE AND SUMMARY IS INCLUDED FOR CROSS-REFERENCE. THE SELECTED BIBLIOGRAPHY IS APPENDED IN THE REGION VII REPORT. THIS DOCUMENT IS ONE IN A SERIES OF 69 WHICH PRESENTS INFORMATION FOR EACH OF THE STATES, WASHINGTON, D.C., PUERTO RICO, AND THE VIRGIN ISLANDS, AND NATIONAL AND REGIONAL SUMMARIES. (CS)

GRANT NUMBER: EPA-T-900591010

INSTITUTION NAME: NATIONAL FIELD RESEARCH CENTER INC., IOWA CITY, IOWA.

SPONSORING AGENCY NAME: ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, D. C.

ACCESSION NUMBER: ED147130

CLEARINGHOUSE ACCESSION NUMBER: SE023308

PUBLICATION DATE: 77

TITLE: NATIONAL ENVIRONMENTAL/ENERGY WORKFORCE ASSESSMENT FOR KANSAS.

INSTITUTION CODE: 88815099

SPONSORING AGENCY CODE: BB806039

DESCRIPTOR: AIR POLLUTION CONTROL; *CAREER OPPORTUNITIES; *EDUCATIONAL PROGRAMS; ENERGY; ENVIRONMENT; *MANPOWER NEEDS; PESTICIDES; *POLLUTION; POST SECONDARY EDUCATION; RADIATION; *STATE LEGISLATION; WATER POLLUTION CONTROL; *KANSAS; NOISE; SOLID WASTES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$10.03 PLUS POSTAGE.

DESCRIPTIVE NOTE: 192P.; FOR RELATED DOCUMENTS, SEE SE 023 292-360; CONTAINS OCCASIONAL COLORED PAGES

ISSUE: RIEAPR78

ABSTRACT: THIS REPORT PRESENTS EXISTING WORKFORCE LEVELS, TRAINING PROGRAMS AND CAREER POTENTIALS AND DEVELOPS STAFFING LEVEL PROJECTIONS (1976-1982) BASED ON AVAILABLE INFORMATION FOR THE STATE OF KANSAS. THE STUDY CONCERNS ITSELF WITH THE ENVIRONMENTAL POLLUTION CONTROL AREAS OF AIR, NOISE, POTABLE WATER, PESTICIDES, RADIATION, SOLID WASTE, WASTEWATER, AND ENERGY. THE FORMAT INCLUDES WORKFORCE PROFILES, PROJECTIONS, GROWTH AND CAREER OPTIONS FOR EACH OF THE AREAS INVESTIGATED. ADDITIONAL SECTIONS OF THE REPORT OUTLINE STATE LEGISLATION AND SELECTED POST SECONDARY INSTITUTIONS WITH FORMAL ENVIRONMENTAL/ENERGY PROGRAMS. A STATE PROFILE AND SUMMARY IS INCLUDED FOR CROSS-REFERENCE. THE SELECTED BIBLIOGRAPHY IS APPENDED IN THE REGION VII REPORT. THIS DOCUMENT IS ONE IN A SERIES OF 69 WHICH PRESENTS INFORMATION FOR EACH OF THE STATES, WASHINGTON, D.C., PUERTO RICO, AND THE VIRGIN ISLANDS, AND NATIONAL AND REGIONAL SUMMARIES. (CS)

GRANT NUMBER: EPA-T-900591010

INSTITUTION NAME: NATIONAL FIELD RESEARCH CENTER INC., IOWA CITY, IOWA.

SPONSORING AGENCY NAME: ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, D. C.

ACCESSION NUMBER: ED147131

CLEARINGHOUSE ACCESSION NUMBER: SE023309

PUBLICATION DATE: 77

TITLE: NATIONAL ENVIRONMENTAL/ENERGY WORKFORCE ASSESSMENT FOR KENTUCKY.

INSTITUTION CODE: BB815099

SPONSORING AGENCY CODE: BB806039

DESCRIPTOR: AIR POLLUTION CONTROL; *CAREER OPPORTUNITIES; *EDUCATIONAL PROGRAMS; ENERGY; ENVIRONMENT; *MANPOWER NEEDS; PESTICIDES; *POLLUTION; POST SECONDARY EDUCATION; RADIATION; *STATE LEGISLATION; WATER POLLUTION CONTROL; *KENTUCKY; NOISE; SOLID WASTES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$7.35 PLUS POSTAGE.

DESCRIPTIVE NOTE: 131P.; FOR RELATED DOCUMENTS, SEE SE 023 292-360; CONTAINS OCCASIONAL COLORED PAGES AND SMALL PRINT

ISSUE: RIEAPR78

ABSTRACT: THIS REPORT PRESENTS EXISTING WORKFORCE LEVELS, TRAINING PROGRAMS AND CAREER POTENTIALS AND DEVELOPS STAFFING LEVEL PROJECTIONS (1976-1982) BASED ON AVAILABLE INFORMATION FOR THE STATE OF KENTUCKY. THE STUDY CONCERNS ITSELF WITH THE ENVIRONMENTAL POLLUTION CONTROL AREAS OF AIR, NOISE, POTABLE WATER, PESTICIDES, RADIATION, SOLID WASTE, WASTEWATER, AND ENERGY. THE FORMAT INCLUDES WORKFORCE PROFILES, PROJECTIONS, GROWTH AND CAREER OPTIONS FOR EACH OF THE AREAS INVESTIGATED. ADDITIONAL SECTIONS OF THE REPORT OUTLINE STATE LEGISLATION AND SELECTED POST SECONDARY INSTITUTIONS WITH FORMAL ENVIRONMENTAL/ENERGY PROGRAMS. A STATE PROFILE AND SUMMARY IS INCLUDED FOR CROSS-REFERENCE. THE SELECTED BIBLIOGRAPHY IS APPENDED IN THE REGION IV REPORT. THIS DOCUMENT IS ONE IN A SERIES OF 69 WHICH PRESENTS INFORMATION FOR EACH OF THE STATES, WASHINGTON, D.C., PUERTO RICO, AND THE VIRGIN ISLANDS, AND NATIONAL AND REGIONAL SUMMARIES. (CS)

GRANT NUMBER: EPA-T-900591010

INSTITUTION NAME: NATIONAL FIELD RESEARCH CENTER INC., IOWA CITY, IOWA.

SPONSORING AGENCY NAME: ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, D. C.

ACCESSION NUMBER: ED147132

CLEARINGHOUSE ACCESSION NUMBER: SE023310

PUBLICATION DATE: 77

TITLE: NATIONAL ENVIRONMENTAL/ENERGY WORKFORCE ASSESSMENT FOR LOUISIANA.

INSTITUTION CODE: BB815099

SPONSORING AGENCY CODE: BB806039

DESCRIPTOR: AIR POLLUTION CONTROL; *CAREER OPPORTUNITIES; *EDUCATIONAL PROGRAMS; ENERGY; ENVIRONMENT; *MANPOWER NEEDS; PESTICIDES; *POLLUTION; POST SECONDARY EDUCATION; RADIATION; *STATE LEGISLATION; WATER POLLUTION CONTROL; *LOUISIANA; NOISE; SOLID WASTES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$6.01 PLUS POSTAGE.

DESCRIPTIVE NOTE: 104P.; FOR RELATED DOCUMENTS, SEE SE 023 292-360; CONTAINS OCCASIONAL COLORED PAGES; PAGE 42 MISSING FROM DOCUMENT PRIOR TO BEING SHIPPED TO EDRS FOR FILMING; BEST COPY AVAILABLE

ISSUE: RIEAPR78

ABSTRACT: THIS REPORT PRESENTS EXISTING WORKFORCE LEVELS, TRAINING PROGRAMS AND CAREER POTENTIALS AND DEVELOPS STAFFING LEVEL PROJECTIONS (1976-1982) BASED ON AVAILABLE INFORMATION FOR THE STATE OF LOUISIANA. THE STUDY CONCERNS ITSELF WITH THE ENVIRONMENTAL POLLUTION CONTROL AREAS OF AIR, NOISE, POTABLE WATER, PESTICIDES, RADIATION, SOLID WASTE, WASTEWATER, AND ENERGY. THE FORMAT INCLUDES WORKFORCE PROFILES, PROJECTIONS, GROWTH AND CAREER OPTIONS FOR EACH OF THE AREAS INVESTIGATED. ADDITIONAL SECTIONS OF THE REPORT OUTLINE STATE LEGISLATION AND SELECTED POST SECONDARY INSTITUTIONS WITH FORMAL ENVIRONMENTAL/ENERGY PROGRAMS. A STATE PROFILE AND SUMMARY IS INCLUDED FOR CROSS-REFERENCE. THE SELECTED BIBLIOGRAPHY IS APPENDED IN THE REGION VI REPORT. THIS DOCUMENT IS ONE IN A SERIES OF 69 WHICH PRESENTS INFORMATION FOR EACH OF THE STATES, WASHINGTON, D.C., PUERTO RICO, AND THE VIRGIN ISLANDS, AND NATIONAL AND REGIONAL SUMMARIES. (CS)

GRANT NUMBER: EPA-T-900591010

INSTITUTION NAME: NATIONAL FIELD RESEARCH CENTER INC., IOWA CITY, IOWA.

SPONSORING AGENCY NAME: ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, D. C.

ACCESSION NUMBER: ED147133

CLEARINGHOUSE ACCESSION NUMBER: SE023311

PUBLICATION DATE: 77

TITLE: NATIONAL ENVIRONMENTAL/ENERGY WORKFORCE ASSESSMENT FOR MAINE.

INSTITUTION CODE: BB815099

SPONSORING AGENCY CODE: BB806039

DESCRIPTOR: AIR POLLUTION CONTROL; *CAREER OPPORTUNITIES; *EDUCATIONAL PROGRAMS; ENERGY; ENVIRONMENT; *MANPOWER NEEDS; PESTICIDES; *POLLUTION; POST SECONDARY EDUCATION; RADIATION; *STATE LEGISLATION; WATER POLLUTION CONTROL; *MAINE; NOISE; SOLID WASTES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$6.01 PLUS POSTAGE.

DESCRIPTIVE NOTE: 120P.; FOR RELATED DOCUMENTS, SEE SE 023 292-360; CONTAINS OCCASIONAL COLORED PAGES

ISSUE: RIEAPR78

ABSTRACT: THIS REPORT PRESENTS EXISTING WORKFORCE LEVELS, TRAINING PROGRAMS AND CAREER POTENTIALS AND DEVELOPS STAFFING LEVEL PROJECTIONS (1976-1982) BASED ON AVAILABLE INFORMATION FOR THE STATE OF MAINE. THE STUDY CONCERNS ITSELF WITH THE ENVIRONMENTAL POLLUTION CONTROL AREAS OF AIR, NOISE, POTABLE WATER, PESTICIDES, RADIATION, SOLID WASTE, WASTEWATER, AND ENERGY. THE FORMAT INCLUDES WORKFORCE PROFILES, PROJECTIONS, GROWTH AND CAREER OPTIONS FOR EACH OF THE AREAS INVESTIGATED. ADDITIONAL SECTIONS OF THE REPORT OUTLINE STATE LEGISLATION AND SELECTED POST SECONDARY INSTITUTIONS WITH FORMAL ENVIRONMENTAL/ENERGY PROGRAMS. A STATE PROFILE AND SUMMARY IS INCLUDED FOR CROSS-REFERENCE. THE SELECTED BIBLIOGRAPHY IS APPENDED IN THE REGION I REPORT. THIS DOCUMENT IS ONE IN A SERIES OF 69 WHICH PRESENTS INFORMATION FOR EACH OF THE STATES, WASHINGTON, D.C., PUERTO RICO, AND THE VIRGIN ISLANDS, AND NATIONAL AND REGIONAL SUMMARIES. (CS)

GRANT NUMBER: EPA-T-900591010

INSTITUTION NAME: NATIONAL FIELD RESEARCH CENTER INC., IOWA CITY, IOWA.

SPONSORING AGENCY NAME: ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, D. C.

ACCESSION NUMBER: ED147134

CLEARINGHOUSE ACCESSION NUMBER: SE023312

PUBLICATION DATE: 77

TITLE: NATIONAL ENVIRONMENTAL/ENERGY WORKFORCE ASSESSMENT FOR MARYLAND.

INSTITUTION CODE: BB815099

SPONSORING AGENCY CODE: BB806039

DESCRIPTOR: AIR POLLUTION CONTROL; *CAREER OPPORTUNITIES; *EDUCATIONAL PROGRAMS; ENERGY; ENVIRONMENT; *MANPOWER NEEDS; PESTICIDES; *POLLUTION; POST SECONDARY EDUCATION; RADIATION; *STATE LEGISLATION; WATER POLLUTION CONTROL; *MARYLAND; NOISE; SOLID WASTES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$6.01 PLUS POSTAGE.

DESCRIPTIVE NOTE: 124P.; FOR RELATED DOCUMENTS, SEE SE 023 292-360; CONTAINS OCCASIONAL COLORED PAGES

ISSUE: RIEAPR78

ABSTRACT: THIS REPORT PRESENTS EXISTING WORKFORCE LEVELS, TRAINING PROGRAMS AND CAREER POTENTIALS AND DEVELOPS STAFFING LEVEL PROJECTIONS (1976-1982) BASED ON AVAILABLE INFORMATION FOR THE STATE OF MARYLAND. THE STUDY CONCERNS ITSELF WITH THE ENVIRONMENTAL POLLUTION CONTROL AREAS OF AIR, NOISE, POTABLE WATER, PESTICIDES, RADIATION, SOLID WASTE, WASTEWATER, AND ENERGY. THE FORMAT INCLUDES WORKFORCE PROFILES, PROJECTIONS, GROWTH AND CAREER OPTIONS FOR EACH OF THE AREAS INVESTIGATED. ADDITIONAL SECTIONS OF THE REPORT OUTLINE STATE LEGISLATION AND SELECTED POST SECONDARY INSTITUTIONS WITH FORMAL ENVIRONMENTAL/ENERGY PROGRAMS. A STATE PROFILE AND SUMMARY IS INCLUDED FOR CROSS-REFERENCE. THE SELECTED BIBLIOGRAPHY IS APPENDED IN THE REGION III REPORT. THIS DOCUMENT IS ONE IN A SERIES OF 69 WHICH PRESENTS INFORMATION FOR EACH OF THE STATES, WASHINGTON, D.C., PUERTO RICO, AND THE VIRGIN ISLANDS, AND NATIONAL AND REGIONAL SUMMARIES. (CS)

GRANT NUMBER: EPA-T-900591010

INSTITUTION NAME: NATIONAL FIELD RESEARCH CENTER INC., IOWA CITY, IOWA.

SPONSORING AGENCY NAME: ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, D. C.

ACCESSION NUMBER: ED147135

CLEARINGHOUSE ACCESSION NUMBER: SE023313

PUBLICATION DATE: 77

TITLE: NATIONAL ENVIRONMENTAL/ENERGY WORKFORCE ASSESSMENT FOR MASSACHUSETTS.

INSTITUTION CODE: 88815099

SPONSORING AGENCY CODE: 88806039

DESCRIPTOR: AIR POLLUTION CONTROL; *CAREER OPPORTUNITIES; *EDUCATIONAL PROGRAMS; ENERGY; ENVIRONMENT; *MANPOWER NEEDS; PESTICIDES; *POLLUTION; POST SECONDARY EDUCATION; RADIATION; *STATE LEGISLATION; WATER POLLUTION CONTROL; *MASSACHUSETTS; NOISE; SOLID WASTES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$7.35 PLUS POSTAGE.

DESCRIPTIVE NOTE: 135P.; FOR RELATED DOCUMENTS, SEE SE 023 292-360; CONTAINS OCCASIONAL COLORED PAGES

ISSUE: RIEAPR78

ABSTRACT: THIS REPORT PRESENTS EXISTING WORKFORCE LEVELS, TRAINING PROGRAMS AND CAREER POTENTIALS AND DEVELOPS STAFFING LEVEL PROJECTIONS (1976-1982) BASED ON AVAILABLE INFORMATION FOR THE STATE OF MASSACHUSETTS. THE STUDY CONCERNS ITSELF WITH THE ENVIRONMENTAL POLLUTION CONTROL AREAS OF AIR, NOISE, POTABLE WATER, PESTICIDES, RADIATION, SOLID WASTE, WASTEWATER, AND ENERGY. THE FORMAT INCLUDES WORKFORCE PROFILES, PROJECTIONS, GROWTH AND CAREER OPTIONS FOR EACH OF THE AREAS INVESTIGATED, ADDITIONAL SECTIONS OF THE REPORT OUTLINE STATE LEGISLATION AND SELECTED POST SECONDARY INSTITUTIONS WITH FORMAL ENVIRONMENTAL/ENERGY PROGRAMS. A STATE PROFILE AND SUMMARY IS INCLUDED FOR CROSS-REFERENCE. THE SELECTED BIBLIOGRAPHY IS APPENDED IN THE REGION I REPORT. THIS DOCUMENT IS ONE IN A SERIES OF 69 WHICH PRESENTS INFORMATION FOR EACH OF THE STATES, WASHINGTON, D.C., PUERTO RICO, AND THE VIRGIN ISLANDS, AND NATIONAL AND REGIONAL SUMMARIES. (CS)

GRANT NUMBER: EPA-T-900591010

INSTITUTION NAME: NATIONAL FIELD RESEARCH CENTER INC., IOWA CITY, IOWA.

SPONSORING AGENCY NAME: ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, D. C.

ACCESSION NUMBER: ED147136

CLEARINGHOUSE ACCESSION NUMBER: SE023314

PUBLICATION DATE: 77

TITLE: NATIONAL ENVIRONMENTAL/ENERGY WORKFORCE ASSESSMENT FOR MICHIGAN.

INSTITUTION CODE: 88815099

SPONSORING AGENCY CODE: 88806039

DESCRIPTOR: AIR POLLUTION CONTROL; *CAREER OPPORTUNITIES; *EDUCATIONAL PROGRAMS; ENERGY; ENVIRONMENT; *MANPOWER NEEDS; PESTICIDES; *POLLUTION; POST SECONDARY EDUCATION; RADIATION; *STATE LEGISLATION; WATER POLLUTION CONTROL; *MICHIGAN; NOISE; SOLID WASTES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$7.35 PLUS POSTAGE.

DESCRIPTIVE NOTE: 140P.; FOR RELATED DOCUMENTS, SEE SE 023 292-360; CONTAINS OCCASIONAL COLORED PAGES ; SEVERAL FIGURES MARGINALLY LEGIBLE

ISSUE: RIEAPR78

ABSTRACT: THIS REPORT PRESENTS EXISTING WORKFORCE LEVELS, TRAINING PROGRAMS AND CAREER POTENTIALS AND DEVELOPS STAFFING LEVEL PROJECTIONS (1976-1982) BASED ON AVAILABLE INFORMATION FOR THE STATE OF MICHIGAN. THE STUDY CONCERNS ITSELF WITH THE ENVIRONMENTAL POLLUTION CONTROL AREAS OF AIR, NOISE, POTABLE WATER, PESTICIDES, RADIATION, SOLID WASTE, WASTEWATER, AND ENERGY. THE FORMAT INCLUDES WORKFORCE PROFILES, PROJECTIONS, GROWTH AND CAREER OPTIONS FOR EACH OF THE AREAS INVESTIGATED, ADDITIONAL SECTIONS OF THE REPORT OUTLINE STATE LEGISLATION AND SELECTED POST SECONDARY INSTITUTIONS WITH FORMAL ENVIRONMENTAL/ENERGY PROGRAMS. A STATE PROFILE AND SUMMARY IS INCLUDED FOR CROSS-REFERENCE. THE SELECTED BIBLIOGRAPHY IS APPENDED IN THE REGION V REPORT. THIS DOCUMENT IS ONE IN A SERIES OF 69 WHICH PRESENTS INFORMATION FOR EACH OF THE STATES, WASHINGTON, D.C., PUERTO RICO, AND THE VIRGIN ISLANDS, AND NATIONAL AND REGIONAL SUMMARIES. (CS)

GRANT NUMBER: EPA-T-900591010

INSTITUTION NAME: NATIONAL FIELD RESEARCH CENTER INC., IOWA CITY, IOWA.

SPONSORING AGENCY NAME: ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, D. C.

ACCESSION NUMBER: ED147137

CLEARINGHOUSE ACCESSION NUMBER: SE023315

PUBLICATION DATE: 77

TITLE: NATIONAL ENVIRONMENTAL/ENERGY WORKFORCE ASSESSMENT FOR MINNESOTA.

INSTITUTION CODE: 88815099

SPONSORING AGENCY CODE: 88806039

DESCRIPTOR: AIR POLLUTION CONTROL; *CAREER OPPORTUNITIES; *EDUCATIONAL PROGRAMS; ENERGY; ENVIRONMENT; *MANPOWER NEEDS; PESTICIDES; *POLLUTION; POST SECONDARY EDUCATION; RADIATION; *STATE LEGISLATION; WATER POLLUTION CONTROL; *MINNESOTA; NOISE; SOLID WASTES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$7.35 PLUS POSTAGE.

DESCRIPTIVE NOTE: 147P.; FOR RELATED DOCUMENTS, SEE SE 023 292-360; CONTAINS OCCASIONAL COLORED PAGES

ISSUE: RIEAPR78

ABSTRACT: THIS REPORT PRESENTS EXISTING WORKFORCE LEVELS, TRAINING PROGRAMS AND CAREER POTENTIALS AND DEVELOPS STAFFING LEVEL PROJECTIONS (1976-1982) BASED ON AVAILABLE INFORMATION FOR THE STATE OF MINNESOTA. THE STUDY CONCERNS ITSELF WITH THE ENVIRONMENTAL POLLUTION CONTROL AREAS OF AIR, NOISE, POTABLE WATER, PESTICIDES, RADIATION, SOLID WASTE, WASTEWATER, AND ENERGY. THE FORMAT INCLUDES WORKFORCE PROFILES, PROJECTIONS, GROWTH AND CAREER OPTIONS FOR EACH OF THE AREAS INVESTIGATED, ADDITIONAL SECTIONS OF THE REPORT OUTLINE STATE LEGISLATION AND SELECTED POST SECONDARY INSTITUTIONS WITH FORMAL ENVIRONMENTAL/ENERGY PROGRAMS. A STATE PROFILE AND SUMMARY IS INCLUDED FOR CROSS-REFERENCE. THE SELECTED BIBLIOGRAPHY IS APPENDED IN THE REGION V REPORT. THIS DOCUMENT IS ONE IN A SERIES OF 69 WHICH PRESENTS INFORMATION FOR EACH OF THE STATES, WASHINGTON, D.C., PUERTO RICO, AND THE VIRGIN ISLANDS, AND NATIONAL AND REGIONAL SUMMARIES. (CS)

GRANT NUMBER: EPA-T-900591010

INSTITUTION NAME: NATIONAL FIELD RESEARCH CENTER INC., IOWA CITY, IOWA.

SPONSORING AGENCY NAME: ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, D. C.

ACCESSION NUMBER: ED147138

CLEARINGHOUSE ACCESSION NUMBER: SE023316

PUBLICATION DATE: 77

TITLE: NATIONAL ENVIRONMENTAL/ENERGY WORKFORCE ASSESSMENT FOR MISSISSIPPI.

INSTITUTION CODE: 88815099

SPONSORING AGENCY CODE: 88806039

DESCRIPTOR: AIR POLLUTION CONTROL; *CAREER OPPORTUNITIES; *EDUCATIONAL PROGRAMS; ENERGY; ENVIRONMENT; *MANPOWER NEEDS; PESTICIDES; *POLLUTION; POST SECONDARY EDUCATION; RADIATION; *STATE LEGISLATION; WATER POLLUTION CONTROL; *MISSISSIPPI; NOISE; SOLID WASTES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$7.35 PLUS POSTAGE.

DESCRIPTIVE NOTE: 130P.; FOR RELATED DOCUMENTS, SEE SE 023 292-360; CONTAINS OCCASIONAL COLORED PAGES ; SEVERAL FIGURES MARGINALLY LEGIBLE

ISSUE: RIEAPR78

ABSTRACT: THIS REPORT PRESENTS EXISTING WORKFORCE LEVELS, TRAINING PROGRAMS AND CAREER POTENTIALS AND DEVELOPS STAFFING LEVEL PROJECTIONS (1976-1982) BASED ON AVAILABLE INFORMATION FOR THE STATE OF MISSISSIPPI. THE STUDY CONCERNS ITSELF WITH THE ENVIRONMENTAL POLLUTION CONTROL AREAS OF AIR, NOISE, POTABLE WATER, PESTICIDES, RADIATION, SOLID WASTE, WASTEWATER, AND ENERGY. THE FORMAT INCLUDES WORKFORCE PROFILES, PROJECTIONS, GROWTH AND CAREER OPTIONS FOR EACH OF THE AREAS INVESTIGATED, ADDITIONAL SECTIONS OF THE REPORT OUTLINE STATE LEGISLATION AND SELECTED POST SECONDARY INSTITUTIONS WITH FORMAL ENVIRONMENTAL/ENERGY PROGRAMS. A STATE PROFILE AND SUMMARY IS INCLUDED FOR CROSS-REFERENCE. THE SELECTED BIBLIOGRAPHY IS APPENDED IN THE REGION IV REPORT. THIS DOCUMENT IS ONE IN A SERIES OF 69 WHICH PRESENTS INFORMATION FOR EACH OF THE STATES, WASHINGTON, D.C., PUERTO RICO, AND THE VIRGIN ISLANDS, AND NATIONAL AND REGIONAL SUMMARIES. (CS)

GRANT NUMBER: EPA-T-900591010

INSTITUTION NAME: NATIONAL FIELD RESEARCH CENTER INC., IOWA CITY, IOWA.

SPONSORING AGENCY NAME: ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, D. C.

ACCESSION NUMBER: ED147139

CLEARINGHOUSE ACCESSION NUMBER: SE023317

PUBLICATION DATE: 77

TITLE: NATIONAL ENVIRONMENTAL/ENERGY WORKFORCE ASSESSMENT FOR MISSOURI.

INSTITUTION CODE: 88815099

SPONSORING AGENCY CODE: 88806039

DESCRIPTOR: AIR POLLUTION CONTROL; *CAREER OPPORTUNITIES; *EDUCATIONAL PROGRAMS; ENERGY; ENVIRONMENT; *MANPOWER NEEDS; PESTICIDES; *POLLUTION; POST SECONDARY EDUCATION; RADIATION; *STATE LEGISLATION; WATER POLLUTION CONTROL; *MISSOURI; NOISE; SOLID WASTES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$6.61 PLUS POSTAGE.

DESCRIPTIVE NOTE: 120P.; FOR RELATED DOCUMENTS, SEE SE 023 292-360; CONTAINS OCCASIONAL COLORED PAGES

ISSUE: RIEAPR78

ABSTRACT: THIS REPORT PRESENTS EXISTING WORKFORCE LEVELS, TRAINING PROGRAMS AND CAREER POTENTIALS AND DEVELOPS STAFFING LEVEL PROJECTIONS (1976-1982) BASED ON AVAILABLE INFORMATION FOR THE STATE OF MISSOURI. THE STUDY CONCERNS ITSELF WITH THE ENVIRONMENTAL POLLUTION CONTROL AREAS OF AIR, NOISE, POTABLE WATER, PESTICIDES, RADIATION, SOLID WASTE, WASTEWATER, AND ENERGY. THE FORMAT INCLUDES WORKFORCE

PROFILES, PROJECTIONS, GROWTH AND CAREER OPTIONS FOR EACH OF THE AREAS INVESTIGATED. ADDITIONAL SECTIONS OF THE REPORT OUTLINE STATE LEGISLATION AND SELECTED POST SECONDARY INSTITUTIONS WITH FORMAL ENVIRONMENTAL/ENERGY PROGRAMS. A STATE PROFILE AND SUMMARY IS INCLUDED FOR CROSS-REFERENCE. THE SELECTED BIBLIOGRAPHY IS APPENDED IN THE REGION VII REPORT. THIS DOCUMENT IS ONE IN A SERIES OF 69 WHICH PRESENTS INFORMATION FOR EACH OF THE STATES, WASHINGTON, D.C., PUERTO RICO, AND THE VIRGIN ISLANDS, AND NATIONAL AND REGIONAL SUMMARIES. (CS)

GRANT NUMBER: EPA-T-900591010

INSTITUTION NAME: NATIONAL FIELD RESEARCH CENTER INC., IOWA CITY, IOWA.

SPONSORING AGENCY NAME: ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, D. C.

ACCESSION NUMBER: ED147140

CLEARINGHOUSE ACCESSION NUMBER: SE023318

PUBLICATION DATE: 77

TITLE: NATIONAL ENVIRONMENTAL/ENERGY WORKFORCE ASSESSMENT FOR MONTANA.

INSTITUTION CODE: 88815099

SPONSORING AGENCY CODE: 88806039

DESCRIPTOR: AIR POLLUTION CONTROL; *CAREER OPPORTUNITIES; *EDUCATIONAL PROGRAMS; ENERGY; ENVIRONMENT; *MANPOWER NEEDS; PESTICIDES; *POLLUTION; POST SECONDARY EDUCATION; RADIATION; *STATE LEGISLATION; WATER POLLUTION CONTROL; *MONTANA; NOISE; SOLID WASTES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$7.35 PLUS POSTAGE.

DESCRIPTIVE NOTE: 148P.; FOR RELATED DOCUMENTS, SEE SE 023 292-360; CONTAINS OCCASIONAL COLORED PAGES ; SEVERAL FIGURES MARGINALLY LEGIBLE

ISSUE: RIEAPR78

ABSTRACT: THIS REPORT PRESENTS EXISTING WORKFORCE LEVELS, TRAINING PROGRAMS AND CAREER POTENTIALS AND DEVELOPS STAFFING LEVEL PROJECTIONS (1976-1982) BASED ON AVAILABLE INFORMATION FOR THE STATE OF MONTANA. THE STUDY CONCERNS ITSELF WITH THE ENVIRONMENTAL POLLUTION CONTROL AREAS OF AIR, NOISE, POTABLE WATER, PESTICIDES, RADIATION, SOLID WASTE, WASTEWATER, AND ENERGY. THE FORMAT INCLUDES WORKFORCE PROFILES, PROJECTIONS, GROWTH AND CAREER OPTIONS FOR EACH OF THE AREAS INVESTIGATED. ADDITIONAL SECTIONS OF THE REPORT OUTLINE STATE LEGISLATION AND SELECTED POST SECONDARY INSTITUTIONS WITH FORMAL ENVIRONMENTAL/ENERGY PROGRAMS. A STATE PROFILE AND SUMMARY IS INCLUDED FOR CROSS-REFERENCE. THE SELECTED BIBLIOGRAPHY IS APPENDED IN THE REGION VII REPORT. THIS DOCUMENT IS ONE IN A SERIES OF 69 WHICH PRESENTS INFORMATION FOR EACH OF THE STATES, WASHINGTON, D.C., PUERTO RICO, AND THE VIRGIN ISLANDS, AND NATIONAL AND REGIONAL SUMMARIES. (CS)

GRANT NUMBER: EPA-T-900591010

INSTITUTION NAME: NATIONAL FIELD RESEARCH CENTER INC., IOWA CITY, IOWA.

SPONSORING AGENCY NAME: ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, D. C.

ACCESSION NUMBER: ED147141

CLEARINGHOUSE ACCESSION NUMBER: SE023319

PUBLICATION DATE: 77

TITLE: NATIONAL ENVIRONMENTAL/ENERGY WORKFORCE ASSESSMENT FOR NEBRASKA.

INSTITUTION CODE: 88815099

SPONSORING AGENCY CODE: 88806039

DESCRIPTOR: AIR POLLUTION CONTROL; *CAREER OPPORTUNITIES; *EDUCATIONAL PROGRAMS; ENERGY; ENVIRONMENT; *MANPOWER NEEDS; PESTICIDES; *POLLUTION; POST SECONDARY EDUCATION; RADIATION; *STATE LEGISLATION; WATER POLLUTION CONTROL; *NEBRASKA; NOISE; SOLID WASTES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$6.01 PLUS POSTAGE.

DESCRIPTIVE NOTE: 108P.; FOR RELATED DOCUMENTS, SEE SE 023 292-360; CONTAINS OCCASIONAL COLORED PAGES

ISSUE: RIEAPR78

ABSTRACT: THIS REPORT PRESENTS EXISTING WORKFORCE LEVELS, TRAINING PROGRAMS AND CAREER POTENTIALS AND DEVELOPS STAFFING LEVEL PROJECTIONS (1976-1982) BASED ON AVAILABLE INFORMATION FOR THE STATE OF NEBRASKA. THE STUDY CONCERNS ITSELF WITH THE ENVIRONMENTAL POLLUTION CONTROL AREAS OF AIR, NOISE, POTABLE WATER, PESTICIDES, RADIATION, SOLID WASTE, WASTEWATER, AND ENERGY. THE FORMAT INCLUDES WORKFORCE PROFILES, PROJECTIONS, GROWTH AND CAREER OPTIONS FOR EACH OF THE AREAS INVESTIGATED. ADDITIONAL SECTIONS OF THE REPORT OUTLINE STATE LEGISLATION AND SELECTED POST SECONDARY INSTITUTIONS WITH FORMAL ENVIRONMENTAL/ENERGY PROGRAMS. A STATE PROFILE AND SUMMARY IS INCLUDED FOR CROSS-REFERENCE. THE SELECTED BIBLIOGRAPHY IS APPENDED IN THE REGION VII REPORT. THIS DOCUMENT IS ONE IN A SERIES OF 69 WHICH PRESENTS INFORMATION FOR EACH OF THE STATES, WASHINGTON, D.C., PUERTO RICO, AND THE VIRGIN ISLANDS, AND NATIONAL AND REGIONAL SUMMARIES. (CS)

GRANT NUMBER: EPA-T-900591010

INSTITUTION NAME: NATIONAL FIELD RESEARCH CENTER INC., IOWA CITY, IOWA.

SPONSORING AGENCY NAME: ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, D. C.

ACCESSION NUMBER: ED147142

CLEARINGHOUSE ACCESSION NUMBER: SE023320

PUBLICATION DATE: 77

TITLE: NATIONAL ENVIRONMENTAL/ENERGY WORKFORCE ASSESSMENT FOR NEVADA.

INSTITUTION CODE: 88815099

SPONSORING AGENCY CODE: 88806039

DESCRIPTOR: AIR POLLUTION CONTROL; *CAREER OPPORTUNITIES; *EDUCATIONAL PROGRAMS; ENERGY; ENVIRONMENT; *MANPOWER NEEDS; PESTICIDES; *POLLUTION; POST SECONDARY EDUCATION; RADIATION; *STATE LEGISLATION; WATER POLLUTION CONTROL; *NEVADA; NOISE; SOLID WASTES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$4.67 PLUS POSTAGE.

DESCRIPTIVE NOTE: 100P.; FOR RELATED DOCUMENTS, SEE SE 023 292-360; CONTAINS OCCASIONAL COLORED PAGES

ISSUE: RIEAPR78

ABSTRACT: THIS REPORT PRESENTS EXISTING WORKFORCE LEVELS, TRAINING PROGRAMS AND CAREER POTENTIALS AND DEVELOPS STAFFING LEVEL PROJECTIONS (1976-1982) BASED ON AVAILABLE INFORMATION FOR THE STATE OF NEVADA. THE STUDY CONCERNS ITSELF WITH THE ENVIRONMENTAL POLLUTION CONTROL AREAS OF AIR, NOISE, POTABLE WATER, PESTICIDES, RADIATION, SOLID WASTE, WASTEWATER, AND ENERGY. THE FORMAT INCLUDES WORKFORCE PROFILES, PROJECTIONS, GROWTH AND CAREER OPTIONS FOR EACH OF THE AREAS INVESTIGATED. ADDITIONAL SECTIONS OF THE REPORT OUTLINE STATE LEGISLATION AND SELECTED POST SECONDARY INSTITUTIONS WITH FORMAL ENVIRONMENTAL/ENERGY PROGRAMS. A STATE PROFILE AND SUMMARY IS INCLUDED FOR CROSS-REFERENCE. THE SELECTED BIBLIOGRAPHY IS APPENDED IN THE REGION IX REPORT. THIS DOCUMENT IS ONE IN A SERIES OF 69 WHICH PRESENTS INFORMATION FOR EACH OF THE STATES, WASHINGTON, D.C., PUERTO RICO, AND THE VIRGIN ISLANDS, AND NATIONAL AND REGIONAL SUMMARIES. (CS)

GRANT NUMBER: EPA-T-900591010

INSTITUTION NAME: NATIONAL FIELD RESEARCH CENTER INC., IOWA CITY, IOWA.

SPONSORING AGENCY NAME: ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, D. C.

ACCESSION NUMBER: ED147143

CLEARINGHOUSE ACCESSION NUMBER: SE023321

PUBLICATION DATE: 77

TITLE: NATIONAL ENVIRONMENTAL/ENERGY WORKFORCE ASSESSMENT FOR NEW HAMPSHIRE.

INSTITUTION CODE: 88815099

SPONSORING AGENCY CODE: 88806039

DESCRIPTOR: AIR POLLUTION CONTROL; *CAREER OPPORTUNITIES; *EDUCATIONAL PROGRAMS; ENERGY; ENVIRONMENT; *MANPOWER NEEDS; PESTICIDES; *POLLUTION; POST SECONDARY EDUCATION; RADIATION; *STATE LEGISLATION; WATER POLLUTION CONTROL; *NEW HAMPSHIRE; NOISE; SOLID WASTES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$6.01 PLUS POSTAGE.

DESCRIPTIVE NOTE: 106P.; FOR RELATED DOCUMENTS, SEE SE 023 292-360; CONTAINS OCCASIONAL COLORED PAGES

ISSUE: RIEAPR78

ABSTRACT: THIS REPORT PRESENTS EXISTING WORKFORCE LEVELS, TRAINING PROGRAMS AND CAREER POTENTIALS AND DEVELOPS STAFFING LEVEL PROJECTIONS (1976-1982) BASED ON AVAILABLE INFORMATION FOR THE STATE OF NEW HAMPSHIRE. THE STUDY CONCERNS ITSELF WITH THE ENVIRONMENTAL POLLUTION CONTROL AREAS OF AIR, NOISE, POTABLE WATER, PESTICIDES, RADIATION, SOLID WASTE, WASTEWATER, AND ENERGY. THE FORMAT INCLUDES WORKFORCE PROFILES, PROJECTIONS, GROWTH AND CAREER OPTIONS FOR EACH OF THE AREAS INVESTIGATED. ADDITIONAL SECTIONS OF THE REPORT OUTLINE STATE LEGISLATION AND SELECTED POST SECONDARY INSTITUTIONS WITH FORMAL ENVIRONMENTAL/ENERGY PROGRAMS. A STATE PROFILE AND SUMMARY IS INCLUDED FOR CROSS-REFERENCE. THE SELECTED BIBLIOGRAPHY IS APPENDED IN THE REGION I REPORT. THIS DOCUMENT IS ONE IN A SERIES OF 69 WHICH PRESENTS INFORMATION FOR EACH OF THE STATES, WASHINGTON, D.C., PUERTO RICO, AND THE VIRGIN ISLANDS, AND NATIONAL AND REGIONAL SUMMARIES. (CS)

GRANT NUMBER: EPA-T-900591010

INSTITUTION NAME: NATIONAL FIELD RESEARCH CENTER INC., IOWA CITY, IOWA.

SPONSORING AGENCY NAME: ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, D. C.

ACCESSION NUMBER: ED147144

CLEARINGHOUSE ACCESSION NUMBER: SE023322

PUBLICATION DATE: 77

TITLE: NATIONAL ENVIRONMENTAL/ENERGY WORKFORCE ASSESSMENT FOR NEW JERSEY.

INSTITUTION CODE: 88815099

SPONSORING AGENCY CODE: 88806039

DESCRIPTOR: AIR POLLUTION CONTROL; *CAREER OPPORTUNITIES; *EDUCATIONAL PROGRAMS; ENERGY; ENVIRONMENT; *MANPOWER NEEDS; PESTICIDES; *POLLUTION; POST SECONDARY EDUCATION; RADIATION; *STATE LEGISLATION; WATER POLLUTION CONTROL; *NEW JERSEY; NOISE; SOLID WASTES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$6.01 PLUS POSTAGE.

DESCRIPTIVE NOTE: 124P.; FOR RELATED DOCUMENTS, SEE SE 023 292-360; CONTAINS OCCASIONAL COLORED PAGES ; SEVERAL CHARTS MARGINALLY LEGIBLE

ISSUE: RIEAPR78

ABSTRACT: THIS REPORT PRESENTS EXISTING WORKFORCE LEVELS, TRAINING PROGRAMS AND CAREER POTENTIALS AND DEVELOPS STAFFING LEVEL PROJECTIONS (1976-1982) BASED ON AVAILABLE INFORMATION FOR THE STATE OF NEW JERSEY. THE STUDY CONCERNS ITSELF WITH THE ENVIRONMENTAL POLLUTION CONTROL AREAS OF AIR, NOISE, POTABLE WATER, PESTICIDES, RADIATION, SOLID WASTE, WASTEWATER, AND ENERGY. THE FORMAT INCLUDES WORKFORCE PROFILES, PROJECTIONS, GROWTH AND CAREER OPTIONS FOR EACH OF THE AREAS INVESTIGATED. ADDITIONAL SECTIONS OF THE REPORT OUTLINE STATE LEGISLATION AND SELECTED POST SECONDARY INSTITUTIONS WITH FORMAL ENVIRONMENTAL/ENERGY PROGRAMS. A STATE PROFILE AND SUMMARY IS INCLUDED FOR CROSS-REFERENCE. THE SELECTED BIBLIOGRAPHY IS APPENDED IN THE REGION II REPORT. THIS DOCUMENT IS ONE IN A SERIES OF 69 WHICH PRESENTS INFORMATION FOR EACH OF THE STATES, WASHINGTON, D.C., PUERTO RICO, AND THE VIRGIN ISLANDS, AND NATIONAL AND REGIONAL SUMMARIES. (CS)

GRANT NUMBER: EPA-T-900591010

INSTITUTION NAME: NATIONAL FIELD RESEARCH CENTER INC., IOWA CITY, IOWA.

SPONSORING AGENCY NAME: ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, D. C.

ACCESSION NUMBER: ED147145

CLEARINGHOUSE ACCESSION NUMBER: SE023323

PUBLICATION DATE: 77

TITLE: NATIONAL ENVIRONMENTAL/ENERGY WORKFORCE ASSESSMENT FOR NEW MEXICO.

INSTITUTION CODE: 88815099

SPONSORING AGENCY CODE: 88806039

DESCRIPTOR: AIR POLLUTION CONTROL; *CAREER OPPORTUNITIES; *EDUCATIONAL PROGRAMS; ENERGY; ENVIRONMENT; *MANPOWER NEEDS; PESTICIDES; *POLLUTION; POST SECONDARY EDUCATION; RADIATION; *STATE LEGISLATION; WATER POLLUTION CONTROL; *NEW MEXICO; NOISE; SOLID WASTES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$7.35 PLUS POSTAGE.

DESCRIPTIVE NOTE: 130P.; FOR RELATED DOCUMENTS, SEE SE 023 292-360; CONTAINS OCCASIONAL COLORED PAGES

ISSUE: RIEAPR78

ABSTRACT: THIS REPORT PRESENTS EXISTING WORKFORCE LEVELS, TRAINING PROGRAMS AND CAREER POTENTIALS AND DEVELOPS STAFFING LEVEL PROJECTIONS (1976-1982) BASED ON AVAILABLE INFORMATION FOR THE STATE OF NEW MEXICO. THE STUDY CONCERNS ITSELF WITH THE ENVIRONMENTAL POLLUTION CONTROL AREAS OF AIR, NOISE, POTABLE WATER, PESTICIDES, RADIATION, SOLID WASTE, WASTEWATER, AND ENERGY. THE FORMAT INCLUDES WORKFORCE PROFILES, PROJECTIONS, GROWTH AND CAREER OPTIONS FOR EACH OF THE AREAS INVESTIGATED. ADDITIONAL SECTIONS OF THE REPORT OUTLINE STATE LEGISLATION AND SELECTED POST SECONDARY INSTITUTIONS WITH FORMAL ENVIRONMENTAL/ENERGY PROGRAMS. A STATE PROFILE AND SUMMARY IS INCLUDED FOR CROSS-REFERENCE. THE SELECTED BIBLIOGRAPHY IS APPENDED IN THE REGION IV REPORT. THIS DOCUMENT IS ONE IN A SERIES OF 69 WHICH PRESENTS INFORMATION FOR EACH OF THE STATES, WASHINGTON, D.C., PUERTO RICO, AND THE VIRGIN ISLANDS, AND NATIONAL AND REGIONAL SUMMARIES. (CS)

GRANT NUMBER: EPA-T-900591010

INSTITUTION NAME: NATIONAL FIELD RESEARCH CENTER INC., IOWA CITY, IOWA.

SPONSORING AGENCY NAME: ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, D. C.

ACCESSION NUMBER: ED147146

CLEARINGHOUSE ACCESSION NUMBER: SE023324

PUBLICATION DATE: 77

TITLE: NATIONAL ENVIRONMENTAL/ENERGY WORKFORCE ASSESSMENT FOR NEW YORK.

INSTITUTION CODE: 88815099

SPONSORING AGENCY CODE: 88806039

DESCRIPTOR: AIR POLLUTION CONTROL; *CAREER OPPORTUNITIES; *EDUCATIONAL PROGRAMS; ENERGY; ENVIRONMENT; *MANPOWER NEEDS; PESTICIDES; *POLLUTION; POST SECONDARY EDUCATION; RADIATION; *STATE LEGISLATION; WATER POLLUTION CONTROL; *NEW YORK; NOISE; SOLID WASTES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$7.35 PLUS POSTAGE.

DESCRIPTIVE NOTE: 127P.; FOR RELATED DOCUMENTS, SEE SE 023 292-360; CONTAINS OCCASIONAL COLORED PAGES ; SEVERAL FIGURES MARGINALLY LEGIBLE

ISSUE: RIEAPR78

ABSTRACT: THIS REPORT PRESENTS EXISTING WORKFORCE LEVELS, TRAINING PROGRAMS AND CAREER POTENTIALS AND DEVELOPS STAFFING LEVEL PROJECTIONS (1976-1982) BASED ON AVAILABLE INFORMATION FOR THE STATE OF NEW YORK. THE STUDY CONCERNS ITSELF WITH THE ENVIRONMENTAL POLLUTION CONTROL AREAS OF AIR, NOISE, POTABLE WATER, PESTICIDES, RADIATION, SOLID WASTE, WASTEWATER, AND ENERGY. THE FORMAT INCLUDES WORKFORCE PROFILES, PROJECTIONS, GROWTH AND CAREER OPTIONS FOR EACH OF THE AREAS INVESTIGATED. ADDITIONAL SECTIONS OF THE REPORT OUTLINE STATE LEGISLATION AND SELECTED POST SECONDARY INSTITUTIONS WITH FORMAL ENVIRONMENTAL/ENERGY PROGRAMS. A STATE PROFILE AND SUMMARY IS INCLUDED FOR CROSS-REFERENCE. THE SELECTED BIBLIOGRAPHY IS APPENDED IN THE REGION II REPORT. THIS DOCUMENT IS ONE IN A SERIES OF 69 WHICH PRESENTS INFORMATION FOR EACH OF THE STATES, WASHINGTON, D.C., PUERTO RICO, AND THE VIRGIN ISLANDS, AND NATIONAL AND REGIONAL SUMMARIES. (CS)

GRANT NUMBER: EPA-T-900591010

INSTITUTION NAME: NATIONAL FIELD RESEARCH CENTER INC., IOWA CITY, IOWA.

SPONSORING AGENCY NAME: ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, D. C.

ACCESSION NUMBER: ED147147

CLEARINGHOUSE ACCESSION NUMBER: SE023325

PUBLICATION DATE: 77

TITLE: NATIONAL ENVIRONMENTAL/ENERGY WORKFORCE ASSESSMENT FOR NORTH CAROLINA.

INSTITUTION CODE: 88815099

SPONSORING AGENCY CODE: 88806039

DESCRIPTOR: AIR POLLUTION CONTROL; *CAREER OPPORTUNITIES; *EDUCATIONAL PROGRAMS; ENERGY; ENVIRONMENT; *MANPOWER NEEDS; PESTICIDES; *POLLUTION; POST SECONDARY EDUCATION; RADIATION; *STATE LEGISLATION; WATER POLLUTION CONTROL; NOISE; *NORTH CAROLINA; SOLID WASTES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$11.37 PLUS POSTAGE.

DESCRIPTIVE NOTE: 210P.; FOR RELATED DOCUMENTS, SEE SE 023 292-360; CONTAINS OCCASIONAL COLORED PAGES; PAGE 41 MISSING FROM DOCUMENT PRIOR TO BEING SHIPPED TO EDRS FOR FILMING; BEST COPY AVAILABLE

ISSUE: RIEAPR78

ABSTRACT: THIS REPORT PRESENTS EXISTING WORKFORCE LEVELS, TRAINING PROGRAMS AND CAREER POTENTIALS AND DEVELOPS STAFFING LEVEL PROJECTIONS (1976-1982) BASED ON AVAILABLE INFORMATION FOR THE STATE OF NORTH CAROLINA. THE STUDY CONCERNS ITSELF WITH THE ENVIRONMENTAL POLLUTION CONTROL AREAS OF AIR, NOISE, POTABLE WATER, PESTICIDES, RADIATION, SOLID WASTE, WASTEWATER, AND ENERGY. THE FORMAT INCLUDES WORKFORCE PROFILES, PROJECTIONS, GROWTH AND CAREER OPTIONS FOR EACH OF THE AREAS INVESTIGATED. ADDITIONAL SECTIONS OF THE REPORT OUTLINE STATE LEGISLATION AND SELECTED POST SECONDARY INSTITUTIONS WITH FORMAL ENVIRONMENTAL/ENERGY PROGRAMS. A STATE PROFILE AND SUMMARY IS INCLUDED FOR CROSS-REFERENCE. THE SELECTED BIBLIOGRAPHY IS APPENDED IN THE REGION IV REPORT. THIS DOCUMENT IS ONE IN A SERIES OF 69 WHICH PRESENTS INFORMATION FOR EACH OF THE STATES, WASHINGTON, D.C., PUERTO RICO, AND THE VIRGIN ISLANDS, AND NATIONAL AND REGIONAL SUMMARIES. (CS)

GRANT NUMBER: EPA-T-900591010

INSTITUTION NAME: NATIONAL FIELD RESEARCH CENTER INC., IOWA CITY, IOWA.

SPONSORING AGENCY NAME: ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, D. C.

ACCESSION NUMBER: ED147148

CLEARINGHOUSE ACCESSION NUMBER: SE023326

PUBLICATION DATE: 77

TITLE: NATIONAL ENVIRONMENTAL/ENERGY WORKFORCE ASSESSMENT FOR NORTH DAKOTA.

INSTITUTION CODE: 88815099

SPONSORING AGENCY CODE: 88806039

DESCRIPTOR: AIR POLLUTION CONTROL; *CAREER OPPORTUNITIES; *EDUCATIONAL PROGRAMS; ENERGY; ENVIRONMENT; *MANPOWER NEEDS; PESTICIDES; *POLLUTION; POST SECONDARY EDUCATION; RADIATION; *STATE LEGISLATION; WATER POLLUTION CONTROL; NOISE; *NORTH DAKOTA; SOLID WASTES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$6.01 PLUS POSTAGE.

DESCRIPTIVE NOTE: 101P.; FOR RELATED DOCUMENTS, SEE SE 023 292-360; CONTAINS OCCASIONAL COLORED PAGES; PAGE 39 MISSING FROM DOCUMENT PRIOR TO BEING SHIPPED TO EDRS FOR FILMING; BEST COPY AVAILABLE

ISSUE: RIEAPR78

ABSTRACT: THIS REPORT PRESENTS EXISTING WORKFORCE LEVELS, TRAINING PROGRAMS AND CAREER POTENTIALS AND DEVELOPS STAFFING LEVEL PROJECTIONS (1976-1982) BASED ON AVAILABLE INFORMATION FOR THE STATE OF NORTH DAKOTA. THE STUDY CONCERNS ITSELF WITH THE ENVIRONMENTAL POLLUTION CONTROL AREAS OF AIR, NOISE, POTABLE WATER, PESTICIDES, RADIATION, SOLID WASTE, WASTEWATER, AND ENERGY. THE FORMAT INCLUDES WORKFORCE PROFILES, PROJECTIONS, GROWTH AND CAREER OPTIONS FOR EACH OF THE AREAS INVESTIGATED. ADDITIONAL SECTIONS OF THE REPORT OUTLINE STATE LEGISLATION AND SELECTED POST SECONDARY INSTITUTIONS WITH FORMAL ENVIRONMENTAL/ENERGY PROGRAMS. A STATE PROFILE AND SUMMARY IS INCLUDED FOR CROSS-REFERENCE. THE SELECTED BIBLIOGRAPHY IS APPENDED IN THE REGION VIII REPORT. THIS DOCUMENT IS ONE IN A SERIES OF 69 WHICH PRESENTS INFORMATION FOR EACH OF THE STATES, WASHINGTON, D.C., PUERTO RICO, AND THE VIRGIN ISLANDS, AND NATIONAL AND REGIONAL SUMMARIES. (CS)

GRANT NUMBER: EPA-T-900591010

INSTITUTION NAME: NATIONAL FIELD RESEARCH CENTER INC., IOWA CITY, IOWA.

SPONSORING AGENCY NAME: ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, D. C.

ACCESSION NUMBER: ED147149

CLEARINGHOUSE ACCESSION NUMBER: SE023327

PUBLICATION DATE: 77

TITLE: NATIONAL ENVIRONMENTAL/ENERGY WORKFORCE ASSESSMENT FOR OHIO.

INSTITUTION CODE: 88815099

SPONSORING AGENCY CODE: 88806039

DESCRIPTOR: AIR POLLUTION CONTROL; *CAREER OPPORTUNITIES; *EDUCATIONAL PROGRAMS; ENERGY; ENVIRONMENT; *MANPOWER NEEDS; PESTICIDES; *POLLUTION; POST SECONDARY EDUCATION; RADIATION; *STATE LEGISLATION; WATER POLLUTION CONTROL; NOISE; *OHIO; SOLID WASTES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$8.69 PLUS POSTAGE.

DESCRIPTIVE NOTE: 167P.; FOR RELATED DOCUMENTS, SEE SE 023 292-360; CONTAINS OCCASIONAL COLORED PAGES

ISSUE: RIEAPR78

ABSTRACT: THIS REPORT PRESENTS EXISTING WORKFORCE LEVELS, TRAINING PROGRAMS AND CAREER POTENTIALS AND DEVELOPS STAFFING LEVEL PROJECTIONS (1976-1982) BASED ON AVAILABLE INFORMATION FOR THE STATE OF OHIO. THE STUDY CONCERNS ITSELF WITH THE ENVIRONMENTAL POLLUTION CONTROL AREAS OF AIR, NOISE, POTABLE WATER, PESTICIDES, RADIATION, SOLID WASTE, WASTEWATER, AND ENERGY. THE FORMAT INCLUDES WORKFORCE PROFILES, PROJECTIONS, GROWTH AND CAREER OPTIONS FOR EACH OF THE AREAS INVESTIGATED. ADDITIONAL SECTIONS OF THE REPORT OUTLINE STATE LEGISLATION AND SELECTED POST SECONDARY INSTITUTIONS WITH FORMAL ENVIRONMENTAL/ENERGY PROGRAMS. A STATE PROFILE AND SUMMARY IS INCLUDED FOR CROSS-REFERENCE. THE SELECTED BIBLIOGRAPHY IS APPENDED IN THE REGION V REPORT. THIS DOCUMENT IS ONE IN A SERIES OF 69 WHICH PRESENTS INFORMATION FOR EACH OF THE STATES, WASHINGTON, D.C., PUERTO RICO, AND THE VIRGIN ISLANDS, AND NATIONAL AND REGIONAL SUMMARIES. (CS)

GRANT NUMBER: EPA-T-900591010

INSTITUTION NAME: NATIONAL FIELD RESEARCH CENTER INC., IOWA CITY, IOWA.

SPONSORING AGENCY NAME: ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, D. C.

ACCESSION NUMBER: ED147150

CLEARINGHOUSE ACCESSION NUMBER: SE023328

PUBLICATION DATE: 77

TITLE: NATIONAL ENVIRONMENTAL/ENERGY WORKFORCE ASSESSMENT FOR OKLAHOMA.

INSTITUTION CODE: 88815099

SPONSORING AGENCY CODE: 88806039

DESCRIPTOR: AIR POLLUTION CONTROL; *CAREER OPPORTUNITIES; *EDUCATIONAL PROGRAMS; ENERGY; ENVIRONMENT; *MANPOWER NEEDS; PESTICIDES; *POLLUTION; POST SECONDARY EDUCATION; RADIATION; *STATE LEGISLATION; WATER POLLUTION CONTROL; NOISE; *OKLAHOMA; SOLID WASTES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$7.35 PLUS POSTAGE.

DESCRIPTIVE NOTE: 135P.; FOR RELATED DOCUMENTS, SEE SE 023 292-360; CONTAINS OCCASIONAL COLORED PAGES

ISSUE: RIEAPR78

ABSTRACT: THIS REPORT PRESENTS EXISTING WORKFORCE LEVELS, TRAINING PROGRAMS AND CAREER POTENTIALS AND DEVELOPS STAFFING LEVEL PROJECTIONS (1976-1982) BASED ON AVAILABLE INFORMATION FOR THE STATE OF OKLAHOMA. THE STUDY CONCERNS ITSELF WITH THE ENVIRONMENTAL POLLUTION CONTROL AREAS OF AIR, NOISE, POTABLE WATER, PESTICIDES, RADIATION, SOLID WASTE, WASTEWATER, AND ENERGY. THE FORMAT INCLUDES WORKFORCE PROFILES, PROJECTIONS, GROWTH AND CAREER OPTIONS FOR EACH OF THE AREAS INVESTIGATED. ADDITIONAL SECTIONS OF THE REPORT OUTLINE STATE LEGISLATION AND SELECTED POST SECONDARY INSTITUTIONS WITH FORMAL ENVIRONMENTAL/ENERGY PROGRAMS. A STATE PROFILE AND SUMMARY IS INCLUDED FOR CROSS-REFERENCE. THE SELECTED BIBLIOGRAPHY IS APPENDED IN THE REGION VI REPORT. THIS DOCUMENT IS ONE IN A SERIES OF 69 WHICH PRESENTS INFORMATION FOR EACH OF THE STATES, WASHINGTON, D.C., PUERTO RICO, AND THE VIRGIN ISLANDS, AND NATIONAL AND REGIONAL SUMMARIES. (CS)

GRANT NUMBER: EPA-T-900591010

INSTITUTION NAME: NATIONAL FIELD RESEARCH CENTER INC., IOWA CITY, IOWA.

SPONSORING AGENCY NAME: ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, D. C.

ACCESSION NUMBER: ED147151

CLEARINGHOUSE ACCESSION NUMBER: SE023329

PUBLICATION DATE: 77

TITLE: NATIONAL ENVIRONMENTAL/ENERGY WORKFORCE ASSESSMENT FOR OREGON.

INSTITUTION CODE: 88815099

SPONSORING AGENCY CODE: 88806039

DESCRIPTOR: AIR POLLUTION CONTROL; *CAREER OPPORTUNITIES; *EDUCATIONAL PROGRAMS; ENERGY; ENVIRONMENT; *MANPOWER NEEDS; PESTICIDES; *POLLUTION; POST SECONDARY EDUCATION; RADIATION; *STATE LEGISLATION; WATER POLLUTION CONTROL; NOISE; *OREGON; SOLID WASTES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$8.69 PLUS POSTAGE.

DESCRIPTIVE NOTE: 167P.; FOR RELATED DOCUMENTS, SEE SE 023 292-360; CONTAINS OCCASIONAL COLORED PAGES AND SMALL PRINT IN APPENDIX

ISSUE: RIEAPR78

ABSTRACT: THIS REPORT PRESENTS EXISTING WORKFORCE LEVELS, TRAINING PROGRAMS AND CAREER POTENTIALS AND DEVELOPS STAFFING LEVEL PROJECTIONS (1976-1982) BASED ON AVAILABLE INFORMATION FOR THE STATE OF OREGON. THE STUDY CONCERNS ITSELF WITH THE ENVIRONMENTAL POLLUTION CONTROL AREAS OF AIR, NOISE, POTABLE WATER, PESTICIDES, RADIATION, SOLID WASTE, WASTEWATER, AND ENERGY. THE FORMAT INCLUDES WORKFORCE PROFILES, PROJECTIONS, GROWTH AND CAREER OPTIONS FOR EACH OF THE AREAS INVESTIGATED. ADDITIONAL SECTIONS OF THE REPORT OUTLINE STATE LEGISLATION AND SELECTED POST SECONDARY INSTITUTIONS WITH FORMAL ENVIRONMENTAL/ENERGY PROGRAMS. A STATE PROFILE AND SUMMARY IS INCLUDED FOR CROSS-REFERENCE. THE SELECTED BIBLIOGRAPHY IS APPENDED IN THE REGION X REPORT. THIS DOCUMENT IS ONE IN A SERIES OF 69 WHICH PRESENTS INFORMATION FOR EACH OF THE STATES, WASHINGTON, D.C., PUERTO RICO, AND THE VIRGIN ISLANDS, AND NATIONAL AND REGIONAL SUMMARIES. (CS)

GRANT NUMBER: EPA-T-900591010

INSTITUTION NAME: NATIONAL FIELD RESEARCH CENTER INC., IOWA CITY, IOWA.

SPONSORING AGENCY NAME: ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, D. C.

ACCESSION NUMBER: ED147152

CLEARINGHOUSE ACCESSION NUMBER: SE023330

PUBLICATION DATE: 77

TITLE: NATIONAL ENVIRONMENTAL/ENERGY WORKFORCE ASSESSMENT FOR PENNSYLVANIA.

INSTITUTION CODE: 88815099

SPONSORING AGENCY CODE: 88806039

DESCRIPTOR: AIR POLLUTION CONTROL; *CAREER OPPORTUNITIES; *EDUCATIONAL PROGRAMS; ENERGY; ENVIRONMENT; *MANPOWER NEEDS; PESTICIDES; *POLLUTION; POST SECONDARY EDUCATION; RADIATION; *STATE LEGISLATION; WATER POLLUTION CONTROL; NOISE; *PENNSYLVANIA; SOLID WASTES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$6.01 PLUS POSTAGE.

DESCRIPTIVE NOTE: 112P.; FOR RELATED DOCUMENTS, SEE SE 023 292-360; CONTAINS OCCASIONAL COLORED PAGES; FIGURES MARGINALLY LEGIBLE

ISSUE: RIEAPR78

ABSTRACT: THIS REPORT PRESENTS EXISTING WORKFORCE LEVELS, TRAINING PROGRAMS AND CAREER POTENTIALS AND DEVELOPS STAFFING LEVEL PROJECTIONS (1976-1982) BASED ON AVAILABLE INFORMATION FOR THE STATE OF PENNSYLVANIA. THE STUDY CONCERNS ITSELF WITH THE ENVIRONMENTAL POLLUTION CONTROL AREAS OF AIR, NOISE, POTABLE WATER, PESTICIDES, RADIATION, SOLID WASTE, WASTEWATER, AND ENERGY. THE FORMAT INCLUDES WORKFORCE PROFILES, PROJECTIONS, GROWTH AND CAREER OPTIONS FOR EACH OF THE AREAS INVESTIGATED. ADDITIONAL SECTIONS OF THE REPORT OUTLINE STATE LEGISLATION AND SELECTED POST SECONDARY INSTITUTIONS WITH FORMAL ENVIRONMENTAL/ENERGY PROGRAMS. A STATE PROFILE AND SUMMARY IS INCLUDED FOR CROSS-REFERENCE. THE SELECTED BIBLIOGRAPHY IS APPENDED IN THE REGION III REPORT. THIS DOCUMENT IS ONE IN A SERIES OF 69 WHICH PRESENTS INFORMATION FOR EACH OF THE STATES, WASHINGTON, D.C., PUERTO RICO, AND THE VIRGIN ISLANDS, AND NATIONAL AND REGIONAL SUMMARIES. (CS)

GRANT NUMBER: EPA-T-900591010

INSTITUTION NAME: NATIONAL FIELD RESEARCH CENTER INC., IOWA CITY, IOWA.

SPONSORING AGENCY NAME: ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, D. C.

ACCESSION NUMBER: ED147153

CLEARINGHOUSE ACCESSION NUMBER: SE023331

PUBLICATION DATE: 77

TITLE: NATIONAL ENVIRONMENTAL/ENERGY WORKFORCE ASSESSMENT FOR PUERTO RICO.

INSTITUTION CODE: 88815099

SPONSORING AGENCY CODE: 88806039

DESCRIPTOR: AIR POLLUTION CONTROL; *CAREER OPPORTUNITIES; *EDUCATIONAL PROGRAMS; ENERGY; ENVIRONMENT; *MANPOWER NEEDS; PESTICIDES; *POLLUTION; POST SECONDARY EDUCATION; RADIATION; *STATE LEGISLATION; WATER POLLUTION CONTROL; NOISE; *PUERTO RICO; SOLID WASTES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$4.67 PLUS POSTAGE.

DESCRIPTIVE NOTE: 93P.; FOR RELATED DOCUMENTS, SEE SE 023 292-360; CONTAINS OCCASIONAL COLORED PAGES

ISSUE: RIEAPR78

ABSTRACT: THIS REPORT PRESENTS EXISTING WORKFORCE LEVELS, TRAINING PROGRAMS AND CAREER POTENTIALS AND DEVELOPS STAFFING LEVEL PROJECTIONS (1976-1982) BASED ON AVAILABLE INFORMATION FOR THE COMMONWEALTH OF PUERTO RICO. THE STUDY CONCERNS ITSELF WITH THE ENVIRONMENTAL POLLUTION CONTROL AREAS OF AIR, NOISE, POTABLE WATER, PESTICIDES, RADIATION, SOLID WASTE, WASTEWATER, AND ENERGY. THE FORMAT INCLUDES WORKFORCE PROFILES, PROJECTIONS, GROWTH AND CAREER OPTIONS FOR EACH OF THE AREAS INVESTIGATED. ADDITIONAL SECTIONS OF THE REPORT OUTLINE STATE LEGISLATION AND SELECTED POST SECONDARY INSTITUTIONS WITH FORMAL ENVIRONMENTAL/ENERGY PROGRAMS. A STATE PROFILE AND SUMMARY IS INCLUDED FOR CROSS-REFERENCE. THE SELECTED BIBLIOGRAPHY IS APPENDED IN

THE REGION II REPORT. THIS DOCUMENT IS ONE IN A SERIES OF 69 WHICH PRESENTS INFORMATION FOR EACH OF THE STATES, WASHINGTON, D.C., AND THE VIRGIN ISLANDS, AND NATIONAL AND REGIONAL SUMMARIES. (CS)

GRANT NUMBER: EPA-T-900591010

INSTITUTION NAME: NATIONAL FIELD RESEARCH CENTER INC., IOWA CITY, IOWA.

SPONSORING AGENCY NAME: ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, D. C.

ACCESSION NUMBER: ED147154

CLEARINGHOUSE ACCESSION NUMBER: SE023332

PUBLICATION DATE: 77

TITLE: NATIONAL ENVIRONMENTAL/ENERGY WORKFORCE ASSESSMENT FOR RHODE ISLAND.

INSTITUTION CODE: 88815099

SPONSORING AGENCY CODE: 88806039

DESCRIPTOR: AIR POLLUTION CONTROL; *CAREER OPPORTUNITIES; *EDUCATIONAL PROGRAMS; ENERGY; ENVIRONMENT; *MANPOWER NEEDS; PESTICIDES; *POLLUTION; POST SECONDARY EDUCATION; RADIATION; *STATE LEGISLATION; WATER POLLUTION CONTROL; NOISE; *RHODE ISLAND; SOLID WASTES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$4.67 PLUS POSTAGE.

DESCRIPTIVE NOTE: 92P.; FOR RELATED DOCUMENTS, SEE SE 023 292-360; CONTAINS OCCASIONAL COLORED PAGES

ISSUE: RIEAPR78

ABSTRACT: THIS REPORT PRESENTS EXISTING WORKFORCE LEVELS, TRAINING PROGRAMS AND CAREER POTENTIALS AND DEVELOPS STAFFING LEVEL PROJECTIONS (1976-1982) BASED ON AVAILABLE INFORMATION FOR THE STATE OF RHODE ISLAND. THE STUDY CONCERNS ITSELF WITH THE ENVIRONMENTAL POLLUTION CONTROL AREAS OF AIR, NOISE, POTABLE WATER, PESTICIDES, RADIATION, SOLID WASTE, WASTEWATER, AND ENERGY. THE FORMAT INCLUDES WORKFORCE PROFILES, PROJECTIONS, GROWTH AND CAREER OPTIONS FOR EACH OF THE AREAS INVESTIGATED. ADDITIONAL SECTIONS OF THE REPORT OUTLINE STATE LEGISLATION AND SELECTED POST SECONDARY INSTITUTIONS WITH FORMAL ENVIRONMENTAL/ENERGY PROGRAMS. A STATE PROFILE AND SUMMARY IS INCLUDED FOR CROSS-REFERENCE. THE SELECTED BIBLIOGRAPHY IS APPENDED IN THE REGION I REPORT. THIS DOCUMENT IS ONE IN A SERIES OF 69 WHICH PRESENTS INFORMATION FOR EACH OF THE STATES, WASHINGTON, D.C., PUERTO RICO, AND THE VIRGIN ISLANDS, AND NATIONAL AND REGIONAL SUMMARIES. (CS)

GRANT NUMBER: EPA-T-900591010

INSTITUTION NAME: NATIONAL FIELD RESEARCH CENTER INC., IOWA CITY, IOWA.

SPONSORING AGENCY NAME: ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, D. C.

ACCESSION NUMBER: ED147155

CLEARINGHOUSE ACCESSION NUMBER: SE023333

PUBLICATION DATE: 77

TITLE: NATIONAL ENVIRONMENTAL/ENERGY WORKFORCE ASSESSMENT FOR SOUTH CAROLINA.

INSTITUTION CODE: 88815099

SPONSORING AGENCY CODE: 88806039

DESCRIPTOR: AIR POLLUTION CONTROL; *CAREER OPPORTUNITIES; *EDUCATIONAL PROGRAMS; ENERGY; ENVIRONMENT; *MANPOWER NEEDS; PESTICIDES; *POLLUTION; POST SECONDARY EDUCATION; RADIATION; *STATE LEGI' TION; WATER POLLUTION CONTROL; NOISE; SOLID WASTES; *SOU .AROLINA

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$7.35 PLUS POSTAGE.

DESCRIPTIVE NOTE: 144P.; FOR RELATED DOCUMENTS, SE 023 292-360; CONTAINS OCCASIONAL COLORED PAGES

ISSUE: RIEAPR78

ABSTRACT: THIS REPORT PRESENTS EXISTING WORKFORCE LEVELS, TRAINING PROGRAMS AND CAREER POTENTIALS AND DEVELOPS STAFFING LEVEL PROJECTIONS (1976-1982) BASED ON AVAILABLE INFORMATION FOR THE STATE OF SOUTH CAROLINA. THE STUDY CONCERNS ITSELF WITH THE ENVIRONMENTAL POLLUTION CONTROL AREAS OF AIR, NOISE, POTABLE WATER, PESTICIDES, RADIATION, SOLID WASTE, WASTEWATER, AND ENERGY. THE FORMAT INCLUDES WORKFORCE PROFILES, PROJECTIONS, GROWTH AND CAREER OPTIONS FOR EACH OF THE AREAS INVESTIGATED. ADDITIONAL SECTIONS OF THE REPORT OUTLINE STATE LEGISLATION AND SELECTED POST SECONDARY INSTITUTIONS WITH FORMAL ENVIRONMENTAL/ENERGY PROGRAMS. A STATE PROFILE AND SUMMARY IS INCLUDED FOR CROSS-REFERENCE. THE SELECTED BIBLIOGRAPHY IS APPENDED IN THE REGION IV REPORT. THIS DOCUMENT IS ONE IN A SERIES OF 69 WHICH PRESENTS INFORMATION FOR EACH OF THE STATES, WASHINGTON, D.C., PUERTO RICO, AND THE VIRGIN ISLANDS, AND NATIONAL AND REGIONAL SUMMARIES. (CS)

GRANT NUMBER: EPA-T-900591010

INSTITUTION NAME: NATIONAL FIELD RESEARCH CENTER INC., IOWA CITY, IOWA.

SPONSORING AGENCY NAME: ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, D. C.

ACCESSION NUMBER: ED147156

CLEARINGHOUSE ACCESSION NUMBER: SE023334

PUBLICATION DATE: 77

TITLE: NATIONAL ENVIRONMENTAL/ENERGY WORKFORCE ASSESSMENT FOR SOUTH DAKOTA.

INSTITUTION CODE: 88815099

SPONSORING AGENCY CODE: 88806039

DESCRIPTOR: AIR POLLUTION CONTROL; *CAREER OPPORTUNITIES; *EDUCATIONAL PROGRAMS; ENERGY; ENVIRONMENT; *MANPOWER NEEDS; PESTICIDES; *POLLUTION; POST SECONDARY EDUCATION; RADIATION; *STATE LEGISLATION; WATER POLLUTION CONTROL; NOISE; SOLID WASTES; *SOUTH DAKOTA

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$6.01 PLUS POSTAGE.

DESCRIPTIVE NOTE: 108P.; FOR RELATED DOCUMENTS, SEE SE 023 292-360; CONTAINS OCCASIONAL COLORED PAGES

ISSUE: RIEAPR78

ABSTRACT: THIS REPORT PRESENTS EXISTING WORKFORCE LEVELS, TRAINING PROGRAMS AND CAREER POTENTIALS AND DEVELOPS STAFFING LEVEL PROJECTIONS (1976-1982) BASED ON AVAILABLE INFORMATION FOR THE STATE OF SOUTH DAKOTA. THE STUDY CONCERNS ITSELF WITH THE ENVIRONMENTAL POLLUTION CONTROL AREAS OF AIR, NOISE, POTABLE WATER, PESTICIDES, RADIATION, SOLID WASTE, WASTEWATER, AND ENERGY. THE FORMAT INCLUDES WORKFORCE PROFILES, PROJECTIONS, GROWTH AND CAREER OPTIONS FOR EACH OF THE AREAS INVESTIGATED. ADDITIONAL SECTIONS OF THE REPORT OUTLINE STATE LEGISLATION AND SELECTED POST SECONDARY INSTITUTIONS WITH FORMAL ENVIRONMENTAL/ENERGY PROGRAMS. A STATE PROFILE AND SUMMARY IS INCLUDED FOR CROSS-REFERENCE. THE SELECTED BIBLIOGRAPHY IS APPENDED IN THE REGION VIII REPORT. THIS DOCUMENT IS ONE IN A SERIES OF 69 WHICH PRESENTS INFORMATION FOR EACH OF THE STATES, WASHINGTON, D.C., PUERTO RICO, AND THE VIRGIN ISLANDS, AND NATIONAL AND REGIONAL SUMMARIES. (CS)

GRANT NUMBER: EPA-T-900591010

INSTITUTION NAME: NATIONAL FIELD RESEARCH CENTER INC., IOWA CITY, IOWA.

SPONSORING AGENCY NAME: ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, D. C.

ACCESSION NUMBER: ED147157

CLEARINGHOUSE ACCESSION NUMBER: SE023335

PUBLICATION DATE: 77

TITLE: NATIONAL ENVIRONMENTAL/ENERGY WORKFORCE ASSESSMENT FOR TENNESSEE.

INSTITUTION CODE: 88815099

SPONSORING AGENCY CODE: 88806039

DESCRIPTOR: AIR POLLUTION CONTROL; *CAREER OPPORTUNITIES; *EDUCATIONAL PROGRAMS; ENERGY; ENVIRONMENT; *MANPOWER NEEDS; PESTICIDES; *POLLUTION; POST SECONDARY EDUCATION; RADIATION; *STATE LEGISLATION; WATER POLLUTION CONTROL; NOISE; SOLID WASTES; *TENNESSEE

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$8.69 PLUS POSTAGE.

DESCRIPTIVE NOTE: 161P.; FOR RELATED DOCUMENTS, SEE SE 023 292-360; CONTAINS OCCASIONAL COLORED PAGES

ISSUE: RIEAPR78

ABSTRACT: THIS REPORT PRESENTS EXISTING WORKFORCE LEVELS, TRAINING PROGRAMS AND CAREER POTENTIALS AND DEVELOPS STAFFING LEVEL PROJECTIONS (1976-1982) BASED ON AVAILABLE INFORMATION FOR THE STATE OF TENNESSEE. THE STUDY CONCERNS ITSELF WITH THE ENVIRONMENTAL POLLUTION CONTROL AREAS OF AIR, NOISE, POTABLE WATER, PESTICIDES, RADIATION, SOLID WASTE, WASTEWATER, AND ENERGY. THE FORMAT INCLUDES WORKFORCE PROFILES, PROJECTIONS, GROWTH AND CAREER OPTIONS FOR EACH OF THE AREAS INVESTIGATED. ADDITIONAL SECTIONS OF THE REPORT OUTLINE STATE LEGISLATION AND SELECTED POST SECONDARY INSTITUTIONS WITH FORMAL ENVIRONMENTAL/ENERGY PROGRAMS. A STATE PROFILE AND SUMMARY IS INCLUDED FOR CROSS-REFERENCE. THE SELECTED BIBLIOGRAPHY IS APPENDED IN THE REGION IV REPORT. THIS DOCUMENT IS ONE IN A SERIES OF 69 WHICH PRESENTS INFORMATION FOR EACH OF THE STATES, WASHINGTON, D.C., PUERTO RICO, AND THE VIRGIN ISLANDS, AND NATIONAL AND REGIONAL SUMMARIES. (CS)

GRANT NUMBER: EPA-T-900591010

INSTITUTION NAME: NATIONAL FIELD RESEARCH CENTER INC., IOWA CITY, IOWA.

SPONSORING AGENCY NAME: ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, D. C.

ACCESSION NUMBER: ED147158

CLEARINGHOUSE ACCESSION NUMBER: SE023336

PUBLICATION DATE: 77

TITLE: NATIONAL ENVIRONMENTAL/ENERGY WORKFORCE ASSESSMENT FOR TEXAS.

INSTITUTION CODE: 88815099

SPONSORING AGENCY CODE: 88806039

DESCRIPTOR: AIR POLLUTION CONTROL; *CAREER OPPORTUNITIES; *EDUCATIONAL PROGRAMS; ENERGY; ENVIRONMENT; *MANPOWER NEEDS; PESTICIDES; *POLLUTION; POST SECONDARY EDUCATION; RADIATION; *STATE LEGISLATION; WATER POLLUTION CONTROL; NOISE; SOLID WASTES; *TEXAS

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$10.03 PLUS POSTAGE.

DESCRIPTIVE NOTE: 177P.; FOR RELATED DOCUMENTS, SEE SE 023 292-360; CONTAINS OCCASIONAL COLORED PAGES

ISSUE: RIEAPR78

ABSTRACT: THIS REPORT PRESENTS EXISTING WORKFORCE LEVELS, TRAINING PROGRAMS AND CAREER POTENTIALS AND DEVELOPS STAFFING LEVEL PROJECTIONS (1976-1982) BASED ON AVAILABLE INFORMATION FOR THE STATE OF TEXAS. THE STUDY CONCERNS ITSELF WITH THE ENVIRONMENTAL POLLUTION CONTROL AREAS OF AIR, NOISE, POTABLE WATER, PESTICIDES, RADIATION, SOLID WASTE, WASTEWATER, AND ENERGY. THE FORMAT INCLUDES WORKFORCE PROFILES, PROJECTIONS, GROWTH AND CAREER OPTIONS FOR EACH OF THE AREAS INVESTIGATED. ADDITIONAL SECTIONS OF THE REPORT OUTLINE STATE LEGISLATION AND SELECTED POST SECONDARY INSTITUTIONS WITH FORMAL ENVIRONMENTAL/ENERGY PROGRAMS. A STATE PROFILE AND SUMMARY IS INCLUDED FOR CROSS-REFERENCE. THE SELECTED BIBLIOGRAPHY IS APPENDED IN THE REGION VI REPORT. THIS DOCUMENT IS ONE IN A SERIES OF 69 WHICH PRESENTS INFORMATION FOR EACH OF THE STATES, WASHINGTON, D.C., PUERTO RICO, AND THE VIRGIN ISLANDS, AND NATIONAL AND REGIONAL SUMMARIES. (CS)

GRANT NUMBER: EPA-T-900591010

INSTITUTION NAME: NATIONAL FIELD RESEARCH CENTER INC., IOWA CITY, IOWA.

SPONSORING AGENCY NAME: ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, D. C.

ACCESSION NUMBER: ED147159

CLEARINGHOUSE ACCESSION NUMBER: SE023337

PUBLICATION DATE: 77

TITLE: NATIONAL ENVIRONMENTAL/ENERGY WORKFORCE ASSESSMENT FOR UTAH.

INSTITUTION CODE: 88815099

SPONSORING AGENCY CODE: 88806039

DESCRIPTOR: AIR POLLUTION CONTROL; *CAREER OPPORTUNITIES; *EDUCATIONAL PROGRAMS; ENERGY; ENVIRONMENT; *MANPOWER NEEDS; PESTICIDES; *POLLUTION; POST SECONDARY EDUCATION; RADIATION; *STATE LEGISLATION; WATER POLLUTION CONTROL; NOISE; SOLID WASTES; *UTAH

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$7.35 PLUS POSTAGE.

DESCRIPTIVE NOTE: 130P.; FOR RELATED DOCUMENTS, SEE SE 023 292-360; CONTAINS OCCASIONAL COLORED PAGES

ISSUE: R1EAPR78

ABSTRACT: THIS REPORT PRESENTS EXISTING WORKFORCE LEVELS, TRAINING PROGRAMS AND CAREER POTENTIALS AND DEVELOPS STAFFING LEVEL PROJECTIONS (1976-1982) BASED ON AVAILABLE INFORMATION FOR THE STATE OF UTAH. THE STUDY CONCERNS ITSELF WITH THE ENVIRONMENTAL POLLUTION CONTROL AREAS OF AIR, NOISE, POTABLE WATER, PESTICIDES, RADIATION, SOLID WASTE, WASTEWATER, AND ENERGY. THE FORMAT INCLUDES WORKFORCE PROFILES, PROJECTIONS, GROWTH AND CAREER OPTIONS FOR EACH OF THE AREAS INVESTIGATED. ADDITIONAL SECTIONS OF THE REPORT OUTLINE STATE LEGISLATION AND SELECTED POST SECONDARY INSTITUTIONS WITH FORMAL ENVIRONMENTAL/ENERGY PROGRAMS. A STATE PROFILE AND SUMMARY IS INCLUDED FOR CROSS-REFERENCE. THE SELECTED BIBLIOGRAPHY IS APPENDED IN THE REGION VIII REPORT. THIS DOCUMENT IS ONE IN A SERIES OF 69 WHICH PRESENTS INFORMATION FOR EACH OF THE STATES, WASHINGTON, D.C., PUERTO RICO, AND THE VIRGIN ISLANDS, AND NATIONAL AND REGIONAL SUMMARIES. (CS)

GRANT NUMBER: EPA-T-900591010

INSTITUTION NAME: NATIONAL FIELD RESEARCH CENTER INC., IOWA CITY, IOWA.

SPONSORING AGENCY NAME: ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, D. C.

ACCESSION NUMBER: ED147160

CLEARINGHOUSE ACCESSION NUMBER: SE023338

PUBLICATION DATE: 77

TITLE: NATIONAL ENVIRONMENTAL/ENERGY WORKFORCE ASSESSMENT FOR VERMONT.

INSTITUTION CODE: 88815099

SPONSORING AGENCY CODE: 88806039

DESCRIPTOR: AIR POLLUTION CONTROL; *CAREER OPPORTUNITIES; *EDUCATIONAL PROGRAMS; ENERGY; ENVIRONMENT; *MANPOWER NEEDS; PESTICIDES; *POLLUTION; POST SECONDARY EDUCATION; RADIATION; *STATE LEGISLATION; WATER POLLUTION CONTROL; NOISE; SOLID WASTES; *VERMONT

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$7.35 PLUS POSTAGE.

DESCRIPTIVE NOTE: 137P.; FOR RELATED DOCUMENTS, SEE SE 023 292-360; CONTAINS OCCASIONAL COLORED PAGES

ISSUE: R1EAPR78

ABSTRACT: THIS REPORT PRESENTS EXISTING WORKFORCE LEVELS, TRAINING PROGRAMS AND CAREER POTENTIALS AND DEVELOPS STAFFING LEVEL PROJECTIONS (1976-1982) BASED ON AVAILABLE INFORMATION FOR THE STATE OF VERMONT. THE STUDY CONCERNS ITSELF WITH THE ENVIRONMENTAL POLLUTION CONTROL AREAS OF AIR, NOISE, POTABLE WATER, PESTICIDES, RADIATION, SOLID WASTE, WASTEWATER, AND ENERGY. THE FORMAT INCLUDES WORKFORCE PROFILES, PROJECTIONS, GROWTH AND CAREER OPTIONS FOR EACH OF THE AREAS INVESTIGATED. ADDITIONAL SECTIONS OF THE REPORT OUTLINE STATE LEGISLATION AND SELECTED POST SECONDARY INSTITUTIONS WITH FORMAL ENVIRONMENTAL/ENERGY PROGRAMS. A STATE PROFILE AND SUMMARY IS INCLUDED FOR CROSS-REFERENCE. THE SELECTED BIBLIOGRAPHY IS APPENDED IN THE REGION I REPORT. THIS DOCUMENT IS ONE IN A SERIES OF 69 WHICH PRESENTS INFORMATION FOR EACH OF THE STATES, WASHINGTON, D.C., PUERTO RICO, AND THE VIRGIN ISLANDS, AND NATIONAL AND REGIONAL SUMMARIES. (CS)

GRANT NUMBER: EPA-T-900591010

INSTITUTION NAME: NATIONAL FIELD RESEARCH CENTER INC., IOWA CITY, IOWA.

SPONSORING AGENCY NAME: ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, D. C.

ACCESSION NUMBER: ED147161

CLEARINGHOUSE ACCESSION NUMBER: SE023339

PUBLICATION DATE: 77

TITLE: NATIONAL ENVIRONMENTAL/ENERGY WORKFORCE ASSESSMENT FOR VIRGINIA.

INSTITUTION CODE: 88815099

SPONSORING AGENCY CODE: 88806039

DESCRIPTOR: AIR POLLUTION CONTROL; *CAREER OPPORTUNITIES; *EDUCATIONAL PROGRAMS; ENERGY; ENVIRONMENT; *MANPOWER NEEDS; PESTICIDES; *POLLUTION; POST SECONDARY EDUCATION; RADIATION; *STATE LEGISLATION; WATER POLLUTION CONTROL; NOISE; SOLID WASTES; *VIRGINIA

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$7.35 PLUS POSTAGE.

DESCRIPTIVE NOTE: 129P.; FOR RELATED DOCUMENTS, SEE SE 023 292-360; CONTAINS OCCASIONAL COLORED PAGES

ISSUE: R1EAPR78

ABSTRACT: THIS REPORT PRESENTS EXISTING WORKFORCE LEVELS, TRAINING PROGRAMS AND CAREER POTENTIALS AND DEVELOPS STAFFING LEVEL PROJECTIONS (1976-1982) BASED ON AVAILABLE INFORMATION FOR THE STATE OF VIRGINIA. THE STUDY CONCERNS ITSELF WITH THE ENVIRONMENTAL POLLUTION CONTROL AREAS OF AIR, NOISE, POTABLE WATER, PESTICIDES, RADIATION, SOLID WASTE, WASTEWATER, AND ENERGY. THE FORMAT INCLUDES WORKFORCE PROFILES, PROJECTIONS, GROWTH AND CAREER OPTIONS FOR EACH OF THE AREAS INVESTIGATED. ADDITIONAL SECTIONS OF THE REPORT OUTLINE STATE LEGISLATION AND SELECTED POST SECONDARY INSTITUTIONS WITH FORMAL ENVIRONMENTAL/ENERGY PROGRAMS. A STATE PROFILE AND SUMMARY IS INCLUDED FOR CROSS-REFERENCE. THE SELECTED BIBLIOGRAPHY IS APPENDED IN THE REGION III REPORT. THIS DOCUMENT IS ONE IN A SERIES OF 69 WHICH PRESENTS INFORMATION FOR EACH OF THE STATES, WASHINGTON, D.C., PUERTO RICO, AND THE VIRGIN ISLANDS, AND NATIONAL AND REGIONAL SUMMARIES. (CS)

GRANT NUMBER: EPA-T-900591010

INSTITUTION NAME: NATIONAL FIELD RESEARCH CENTER INC., IOWA CITY, IOWA.

SPONSORING AGENCY NAME: ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, D. C.

ACCESSION NUMBER: ED147162

CLEARINGHOUSE ACCESSION NUMBER: SE023340

PUBLICATION DATE: 77

TITLE: NATIONAL ENVIRONMENTAL/ENERGY WORKFORCE ASSESSMENT FOR VIRGIN ISLANDS.

INSTITUTION CODE: 88815099

SPONSORING AGENCY CODE: 88806039

DESCRIPTOR: AIR POLLUTION CONTROL; *CAREER OPPORTUNITIES; *EDUCATIONAL PROGRAMS; ENERGY; ENVIRONMENT; *MANPOWER NEEDS; PESTICIDES; *POLLUTION; POST SECONDARY EDUCATION; RADIATION; *STATE LEGISLATION; WATER POLLUTION CONTROL; NOISE; SOLID WASTES; *VIRGIN ISLANDS

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$4.67 PLUS POSTAGE.

DESCRIPTIVE NOTE: 94P.; FOR RELATED DOCUMENTS, SEE SE 023 292-360; CONTAINS OCCASIONAL COLORED PAGES

ISSUE: R1EAPR78

ABSTRACT: THIS REPORT PRESENTS EXISTING WORKFORCE LEVELS, TRAINING PROGRAMS AND CAREER POTENTIALS AND DEVELOPS STAFFING LEVEL PROJECTIONS (1976-1982) BASED ON AVAILABLE INFORMATION FOR THE TERRITORY OF THE VIRGIN ISLANDS. THE STUDY CONCERNS ITSELF WITH THE ENVIRONMENTAL POLLUTION CONTROL AREAS OF AIR, NOISE, POTABLE WATER, PESTICIDES, RADIATION, SOLID WASTE, WASTEWATER, AND ENERGY. THE FORMAT INCLUDES WORKFORCE PROFILES, PROJECTIONS, GROWTH AND CAREER OPTIONS FOR EACH OF THE AREAS INVESTIGATED. ADDITIONAL SECTIONS OF THE REPORT OUTLINE STATE LEGISLATION AND SELECTED POST SECONDARY INSTITUTIONS WITH FORMAL ENVIRONMENTAL/ENERGY PROGRAMS. A STATE PROFILE AND SUMMARY IS INCLUDED FOR CROSS-REFERENCE. THE SELECTED BIBLIOGRAPHY IS APPENDED IN THE REGION II REPORT. THIS DOCUMENT IS ONE IN A SERIES OF 69 WHICH PRESENTS INFORMATION FOR EACH OF THE STATES, WASHINGTON, D.C., PUERTO RICO, AND NATIONAL AND REGIONAL SUMMARIES. (CS)

GRANT NUMBER: EPA-T-900591010

INSTITUTION NAME: NATIONAL FIELD RESEARCH CENTER INC., IOWA CITY, IOWA.

SPONSORING AGENCY NAME: ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, D. C.

ACCESSION NUMBER: ED147163

CLEARINGHOUSE ACCESSION NUMBER: SE023341

PUBLICATION DATE: 77

TITLE: NATIONAL ENVIRONMENTAL/ENERGY WORKFORCE ASSESSMENT FOR WASHINGTON.

INSTITUTION CODE: 88815099

SPONSORING AGENCY CODE: 88806039

DESCRIPTOR: AIR POLLUTION CONTROL; *CAREER OPPORTUNITIES; *EDUCATIONAL PROGRAMS; ENERGY; ENVIRONMENT; *MANPOWER NEEDS; PESTICIDES; *POLLUTION; POST SECONDARY EDUCATION; RADIATION; *STATE LEGISLATION; WATER POLLUTION CONTROL; NOISE; SOLID WASTES; *WASHINGTON

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$7.35 PLUS POSTAGE.

DESCRIPTIVE NOTE: 129P.; FOR RELATED DOCUMENTS, SEE SE 023 292-360; CONTAINS OCCASIONAL COLORED PAGES

ISSUE: RIEAPR78

ABSTRACT: THIS REPORT PRESENTS EXISTING WORKFORCE LEVELS, TRAINING PROGRAMS AND CAREER POTENTIALS AND DEVELOPS STAFFING LEVEL PROJECTIONS (1976-1982) BASED ON AVAILABLE INFORMATION FOR THE STATE OF WASHINGTON. THE STUDY CONCERNS ITSELF WITH THE ENVIRONMENTAL POLLUTION CONTROL AREAS OF AIR, NOISE, POTABLE WATER, PESTICIDES, RADIATION, SOLID WASTE, WASTEWATER, AND ENERGY. THE FORMAT INCLUDES WORKFORCE PROFILES, PROJECTIONS, GROWTH AND CAREER OPTIONS FOR EACH OF THE AREAS INVESTIGATED. ADDITIONAL SECTIONS OF THE REPORT OUTLINE STATE LEGISLATION AND SELECTED POST SECONDARY INSTITUTIONS WITH FORMAL ENVIRONMENTAL/ENERGY PROGRAMS. A STATE PROFILE AND SUMMARY IS INCLUDED FOR CROSS-REFERENCE. THE SELECTED BIBLIOGRAPHY IS APPENDED IN THE REGION X REPORT. THIS DOCUMENT IS ONE IN A SERIES OF 69 WHICH PRESENTS INFORMATION FOR EACH OF THE STATES, WASHINGTON, D.C., PUERTO RICO, AND THE VIRGIN ISLANDS, AND NATIONAL AND REGIONAL SUMMARIES. (CS)

GRANT NUMBER: EPA-T-900591010

INSTITUTION NAME: NATIONAL FIELD RESEARCH CENTER INC., IOWA CITY, IOWA.

SPONSORING AGENCY NAME: ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, D. C.

ACCESSION NUMBER: ED147164

CLEARINGHOUSE ACCESSION NUMBER: SE023342

PUBLICATION DATE: 77

TITLE: NATIONAL ENVIRONMENTAL/ENERGY WORKFORCE ASSESSMENT FOR WEST VIRGINIA.

INSTITUTION CODE: 88815099

SPONSORING AGENCY CODE: 88806039

DESCRIPTOR: AIR POLLUTION CONTROL; *CAREER OPPORTUNITIES; *EDUCATIONAL PROGRAMS; ENERGY; ENVIRONMENT; *MANPOWER NEEDS; PESTICIDES; *POLLUTION; POST SECONDARY EDUCATION; RADIATION; *STATE LEGISLATION; WATER POLLUTION CONTROL; NOISE; SOLID WASTES; *WEST VIRGINIA

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$4.67 PLUS POSTAGE.

DESCRIPTIVE NOTE: 97P.; FOR RELATED DOCUMENTS, SEE SE 023 292-360; CONTAINS OCCASIONAL COLORED PAGES

ISSUE: RIEAPR78

ABSTRACT: THIS REPORT PRESENTS EXISTING WORKFORCE LEVELS, TRAINING PROGRAMS AND CAREER POTENTIALS AND DEVELOPS STAFFING LEVEL PROJECTIONS (1976-1982) BASED ON AVAILABLE INFORMATION FOR THE STATE OF WEST VIRGINIA. THE STUDY CONCERNS ITSELF WITH THE ENVIRONMENTAL POLLUTION CONTROL AREAS OF AIR, NOISE, POTABLE WATER, PESTICIDES, RADIATION, SOLID WASTE, WASTEWATER, AND ENERGY. THE FORMAT INCLUDES WORKFORCE PROFILES, PROJECTIONS, GROWTH AND CAREER OPTIONS FOR EACH OF THE AREAS INVESTIGATED. ADDITIONAL SECTIONS OF THE REPORT OUTLINE STATE LEGISLATION AND SELECTED POST SECONDARY INSTITUTIONS WITH FORMAL ENVIRONMENTAL/ENERGY PROGRAMS. A STATE PROFILE AND SUMMARY IS INCLUDED FOR CROSS-REFERENCE. THE SELECTED BIBLIOGRAPHY IS APPENDED IN THE REGION VIII REPORT. THIS DOCUMENT IS ONE IN A SERIES OF 69 WHICH PRESENTS INFORMATION FOR EACH OF THE STATES, WASHINGTON, D.C., PUERTO RICO, AND THE VIRGIN ISLANDS, AND NATIONAL AND REGIONAL SUMMARIES. (CS)

GRANT NUMBER: EPA-T-900591010

INSTITUTION NAME: NATIONAL FIELD RESEARCH CENTER INC., IOWA CITY, IOWA.

SPONSORING AGENCY NAME: ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, D. C.

ACCESSION NUMBER: ED147165

CLEARINGHOUSE ACCESSION NUMBER: SE023343

PUBLICATION DATE: 77

TITLE: NATIONAL ENVIRONMENTAL/ENERGY WORKFORCE ASSESSMENT FOR WISCONSIN.

INSTITUTION CODE: 88815099

SPONSORING AGENCY CODE: 88806039

DESCRIPTOR: AIR POLLUTION CONTROL; *CAREER OPPORTUNITIES; *EDUCATIONAL PROGRAMS; ENERGY; ENVIRONMENT; *MANPOWER NEEDS; PESTICIDES; *POLLUTION; POST SECONDARY EDUCATION; RADIATION; *STATE LEGISLATION; WATER POLLUTION CONTROL; NOISE; SOLID WASTES; *WISCONSIN

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$7.35 PLUS POSTAGE.

DESCRIPTIVE NOTE: 142P.; FOR RELATED DOCUMENTS, SEE SE 023 292-360; CONTAINS OCCASIONAL COLORED PAGES

ISSUE: RIEAPR78

ABSTRACT: THIS REPORT PRESENTS EXISTING WORKFORCE LEVELS, TRAINING PROGRAMS AND CAREER POTENTIALS AND DEVELOPS STAFFING LEVEL PROJECTIONS (1976-1982) BASED ON AVAILABLE INFORMATION FOR THE STATE OF WISCONSIN. THE STUDY CONCERNS ITSELF WITH THE ENVIRONMENTAL POLLUTION CONTROL AREAS OF AIR, NOISE, POTABLE WATER, PESTICIDES, RADIATION, SOLID WASTE, WASTEWATER, AND ENERGY. THE FORMAT INCLUDES WORKFORCE PROFILES, PROJECTIONS, GROWTH AND CAREER OPTIONS FOR EACH OF THE AREAS INVESTIGATED. ADDITIONAL SECTIONS OF THE REPORT OUTLINE STATE LEGISLATION AND SELECTED POST SECONDARY INSTITUTIONS WITH FORMAL ENVIRONMENTAL/ENERGY PROGRAMS. A STATE PROFILE AND SUMMARY IS INCLUDED FOR CROSS-REFERENCE. THE SELECTED BIBLIOGRAPHY IS APPENDED IN THE REGION V REPORT. THIS DOCUMENT IS ONE IN A SERIES OF 69 WHICH PRESENTS INFORMATION FOR EACH OF THE STATES, WASHINGTON, D.C., PUERTO RICO, AND THE VIRGIN ISLANDS, AND NATIONAL AND REGIONAL SUMMARIES. (CS)

GRANT NUMBER: EPA-T-900591010

INSTITUTION NAME: NATIONAL FIELD RESEARCH CENTER INC., IOWA CITY, IOWA.

SPONSORING AGENCY NAME: ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, D. C.

ACCESSION NUMBER: ED147166

CLEARINGHOUSE ACCESSION NUMBER: SE023344

PUBLICATION DATE: 77

TITLE: NATIONAL ENVIRONMENTAL/ENERGY WORKFORCE ASSESSMENT FOR WYOMING.

INSTITUTION CODE: 88815099

SPONSORING AGENCY CODE: 88806039

DESCRIPTOR: AIR POLLUTION CONTROL; *CAREER OPPORTUNITIES; *EDUCATIONAL PROGRAMS; ENERGY; ENVIRONMENT; *MANPOWER NEEDS; PESTICIDES; *POLLUTION; POST SECONDARY EDUCATION; RADIATION; *STATE LEGISLATION; WATER POLLUTION CONTROL; NOISE; SOLID WASTES; *WYOMING

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$7.35 PLUS POSTAGE.

DESCRIPTIVE NOTE: 140P.; FOR RELATED DOCUMENTS, SEE SE 023 292-360; CONTAINS OCCASIONAL COLORED PAGES

ISSUE: RIEAPR78

ABSTRACT: THIS REPORT PRESENTS EXISTING WORKFORCE LEVELS, TRAINING PROGRAMS AND CAREER POTENTIALS AND DEVELOPS STAFFING LEVEL PROJECTIONS (1976-1982) BASED ON AVAILABLE INFORMATION FOR THE STATE OF WYOMING. THE STUDY CONCERNS ITSELF WITH THE ENVIRONMENTAL POLLUTION CONTROL AREAS OF AIR, NOISE, POTABLE WATER, PESTICIDES, RADIATION, SOLID WASTE, WASTEWATER, AND ENERGY. THE FORMAT INCLUDES WORKFORCE PROFILES, PROJECTIONS, GROWTH AND CAREER OPTIONS FOR EACH OF THE AREAS INVESTIGATED. ADDITIONAL SECTIONS OF THE REPORT OUTLINE STATE LEGISLATION AND SELECTED POST SECONDARY INSTITUTIONS WITH FORMAL ENVIRONMENTAL/ENERGY PROGRAMS. A STATE PROFILE AND SUMMARY IS INCLUDED FOR CROSS-REFERENCE. THE SELECTED BIBLIOGRAPHY IS APPENDED IN THE REGION VIII REPORT. THIS DOCUMENT IS ONE IN A SERIES OF 69 WHICH PRESENTS INFORMATION FOR EACH OF THE STATES, WASHINGTON, D.C., PUERTO RICO, AND THE VIRGIN ISLANDS, AND NATIONAL AND REGIONAL SUMMARIES. (CS)

GRANT NUMBER: EPA-T-900591010

INSTITUTION NAME: NATIONAL FIELD RESEARCH CENTER INC., IOWA CITY, IOWA.

SPONSORING AGENCY NAME: ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, D. C.

ACCESSION NUMBER: ED147167

CLEARINGHOUSE ACCESSION NUMBER: SE023345

PUBLICATION DATE: 77

TITLE: NATIONAL ENVIRONMENTAL/ENERGY WORKFORCE ASSESSMENT, NATIONAL SUMMARY: ALABAMA-INDIANA. VOLUME ONE.

INSTITUTION CODE: 88815099

SPONSORING AGENCY CODE: 88806039

DESCRIPTOR: AIR POLLUTION CONTROL; *CAREER OPPORTUNITIES; *EDUCATIONAL PROGRAMS; ENERGY; ENVIRONMENT; *MANPOWER NEEDS; NATIONAL SURVEYS; PESTICIDES; *POLLUTION; POST SECONDARY EDUCATION; RADIATION; *STATE LEGISLATION; WATER POLLUTION CONTROL; NOISE; SOLID WASTES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$10.03 PLUS POSTAGE.

DESCRIPTIVE NOTE: 178P.; FOR RELATED DOCUMENTS, SEE SE 023 292-360

ISSUE: RIEAPR78

ABSTRACT: THIS REPORT IS ONE IN A FOUR-VOLUME NATIONAL SUMMARY WHICH PRESENTS EXISTING WORKFORCE LEVELS, TRAINING PROGRAMS AND CAREER POTENTIALS FOR EACH OF THE STATES, WASHINGTON, D.C., PUERTO RICO, AND THE VIRGIN ISLANDS. EACH INDIVIDUAL STATE PROGRAM SUMMARY IS FOLLOWED BY A DEPICTION OF THE CURRENT AND PROJECTED (1976-1981) WORKFORCE FIGURES FOR THE ENVIRONMENTAL POLLUTION CONTROL AREAS OF AIR, NOISE, POTABLE WATER, PESTICIDES, RADIATION, SOLID WASTE, WASTEWATER, AND ENERGY, AN OVERVIEW OF SELECTED ENVIRONMENTAL/ENERGY EDUCATION PROGRAMS IS ALSO INCLUDED. MORE DETAILED INFORMATION MAY BE FOUND IN THE RESPECTIVE STATE OR REGIONAL VOLUMES. THIS REPORT INCLUDES THE FOLLOWING STATES: ALABAMA, ALASKA, ARIZONA, ARKANSAS, CALIFORNIA, COLORADO, CONNECTICUT, DELAWARE, FLORIDA, GEORGIA, HAWAII, IDAHO, ILLINOIS, AND INDIANA. (CS)

GRANT NUMBER: EPA-T-900591010

INSTITUTION NAME: NATIONAL FIELD RESEARCH CENTER INC., IOWA CITY, IOWA.

SPONSORING AGENCY NAME: ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, D. C.

ACCESSION NUMBER: ED147168

CLEARINGHOUSE ACCESSION NUMBER: SE023346

PUBLICATION DATE: 77

TITLE: NATIONAL ENVIRONMENTAL/ENERGY WORKFORCE ASSESSMENT, NATIONAL SUMMARY: IOWA-NEBRASKA. VOLUME TWO.

INSTITUTION CODE: BBB15099

SPONSORING AGENCY CODE: BBB06039

DESCRIPTOR: AIR POLLUTION CONTROL; *CAREER OPPORTUNITIES; *EDUCATIONAL PROGRAMS; ENERGY; ENVIRONMENT; *MANPOWER NEEDS; NATIONAL SURVEYS; PESTICIDES; *POLLUTION; POST SECONDARY EDUCATION; RADIATION; *STATE LEGISLATION; WATER POLLUTION CONTROL; NOISE; SOLID WASTES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$8.69 PLUS POSTAGE.

DESCRIPTIVE NOTE: 166P.; FOR RELATED DOCUMENTS, SEE SE 023 292-360

ISSUE: RIEAPR78

ABSTRACT: THIS REPORT IS ONE IN A FOUR-VOLUME NATIONAL SUMMARY WHICH PRESENTS EXISTING WORKFORCE LEVELS, TRAINING PROGRAMS AND CAREER POTENTIALS FOR EACH OF THE STATES, WASHINGTON, D.C., PUERTO RICO, AND THE VIRGIN ISLANDS. EACH INDIVIDUAL STATE PROGRAM SUMMARY IS FOLLOWED BY A DEPICTION OF THE CURRENT AND PROJECTED (1976-1981) WORKFORCE FIGURES FOR THE ENVIRONMENTAL POLLUTION CONTROL AREAS OF AIR, NOISE, POTABLE WATER, PESTICIDES, RADIATION, SOLID WASTE, WASTEWATER, AND ENERGY. AN OVERVIEW OF SELECTED ENVIRONMENTAL/ENERGY EDUCATION PROGRAMS IS ALSO INCLUDED. MORE DETAILED INFORMATION MAY BE FOUND IN THE RESPECTIVE STATE OR REGIONAL VOLUMES. THIS REPORT INCLUDES THE FOLLOWING STATES: IOWA, KANSAS, KENTUCKY, LOUISIANA, MAINE, MARYLAND, MASSACHUSETTS, MICHIGAN, MINNESOTA, MISSISSIPPI, MISSOURI, MONTANA, AND NEBRASKA. (CS)

GRANT NUMBER: EPA-T-900591010

INSTITUTION NAME: NATIONAL FIELD RESEARCH CENTER INC., IOWA CITY, IOWA.

SPONSORING AGENCY NAME: ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, D. C.

ACCESSION NUMBER: ED147169

CLEARINGHOUSE ACCESSION NUMBER: SE023347

PUBLICATION DATE: 77

TITLE: NATIONAL ENVIRONMENTAL/ENERGY WORKFORCE ASSESSMENT, NATIONAL SUMMARY: NEVADA-SOUTH CAROLINA. VOLUME THREE.

INSTITUTION CODE: BBB15099

SPONSORING AGENCY CODE: BBB06039

DESCRIPTOR: AIR POLLUTION CONTROL; *CAREER OPPORTUNITIES; *EDUCATIONAL PROGRAMS; ENERGY; ENVIRONMENT; *MANPOWER NEEDS; NATIONAL SURVEYS; PESTICIDES; *POLLUTION; POST SECONDARY EDUCATION; RADIATION; *STATE LEGISLATION; WATER POLLUTION CONTROL; NOISE; SOLID WASTES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$8.69 PLUS POSTAGE.

DESCRIPTIVE NOTE: 166P.; FOR RELATED DOCUMENTS, SEE SE 023 292-360

ISSUE: RIEAPR78

ABSTRACT: THIS REPORT IS ONE IN A FOUR-VOLUME NATIONAL SUMMARY WHICH PRESENTS EXISTING WORKFORCE LEVELS, TRAINING PROGRAMS AND CAREER POTENTIALS FOR EACH OF THE STATES, WASHINGTON, D.C., PUERTO RICO, AND THE VIRGIN ISLANDS. EACH INDIVIDUAL STATE PROGRAM SUMMARY IS FOLLOWED BY A DEPICTION OF THE CURRENT AND PROJECTED (1976-1981) WORKFORCE FIGURES FOR THE ENVIRONMENTAL POLLUTION CONTROL AREAS OF AIR, NOISE, POTABLE WATER, PESTICIDES, RADIATION, SOLID WASTE, WASTEWATER, AND ENERGY. AN OVERVIEW OF SELECTED ENVIRONMENTAL/ENERGY EDUCATION PROGRAMS IS ALSO INCLUDED. MORE DETAILED INFORMATION MAY BE FOUND IN THE RESPECTIVE STATE OR REGIONAL VOLUMES. THIS REPORT INCLUDES THE FOLLOWING STATES: NEVADA, NEW HAMPSHIRE, NEW JERSEY, NEW MEXICO, NEW YORK, NORTH CAROLINA, NORTH DAKOTA, OHIO, OKLAHOMA, OREGON, PENNSYLVANIA, RHODE ISLAND, AND SOUTH CAROLINA. (CS)

GRANT NUMBER: EPA-T-900591010

INSTITUTION NAME: NATIONAL FIELD RESEARCH CENTER INC., IOWA CITY, IOWA.

SPONSORING AGENCY NAME: ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, D. C.

ACCESSION NUMBER: ED147170

CLEARINGHOUSE ACCESSION NUMBER: SE023348

PUBLICATION DATE: 77

TITLE: NATIONAL ENVIRONMENTAL/ENERGY WORKFORCE ASSESSMENT, NATIONAL SUMMARY: SOUTH DAKOTA-VIRGIN ISLANDS. VOLUME FOUR.

INSTITUTION CODE: BBB15099

SPONSORING AGENCY CODE: BBB06039

DESCRIPTOR: AIR POLLUTION CONTROL; *CAREER OPPORTUNITIES; *EDUCATIONAL PROGRAMS; ENERGY; ENVIRONMENT; *MANPOWER NEEDS; NATIONAL SURVEYS; PESTICIDES; *POLLUTION; POST SECONDARY EDUCATION; RADIATION; *STATE LEGISLATION; WATER POLLUTION CONTROL; NOISE; SOLID WASTES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$8.69 PLUS POSTAGE.

DESCRIPTIVE NOTE: 166P.; FOR RELATED DOCUMENTS, SEE SE 023 292-360

ISSUE: RIEAPR78

ABSTRACT: THIS REPORT IS ONE IN A FOUR-VOLUME NATIONAL SUMMARY WHICH PRESENTS EXISTING WORKFORCE LEVELS, TRAINING PROGRAMS AND CAREER POTENTIALS FOR EACH OF THE STATES, WASHINGTON, D.C., PUERTO RICO, AND THE VIRGIN ISLANDS. EACH INDIVIDUAL STATE PROGRAM SUMMARY IS FOLLOWED BY A DEPICTION OF THE CURRENT AND PROJECTED (1976-1981) WORKFORCE FIGURES FOR THE ENVIRONMENTAL POLLUTION CONTROL AREAS OF AIR, NOISE, POTABLE WATER, PESTICIDES, RADIATION, SOLID WASTE, WASTEWATER, AND ENERGY. AN OVERVIEW OF SELECTED ENVIRONMENTAL/ENERGY EDUCATION PROGRAMS IS ALSO INCLUDED. MORE DETAILED INFORMATION MAY BE FOUND IN THE RESPECTIVE STATE OR REGIONAL VOLUMES. THIS REPORT INCLUDES THE FOLLOWING STATES: SOUTH DAKOTA, TENNESSEE, TEXAS, UTAH, VERMONT, VIRGINIA, WASHINGTON, WEST VIRGINIA, WISCONSIN, WYOMING, DISTRICT OF COLUMBIA, PUERTO RICO, AND THE VIRGIN ISLANDS. (CS)

GRANT NUMBER: EPA-T-900591010

INSTITUTION NAME: NATIONAL FIELD RESEARCH CENTER INC., IOWA CITY, IOWA.

SPONSORING AGENCY NAME: ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, D. C.

ACCESSION NUMBER: ED147171

CLEARINGHOUSE ACCESSION NUMBER: SE023349

PUBLICATION DATE: 77

TITLE: NATIONAL ENVIRONMENTAL/ENERGY WORKFORCE ASSESSMENT: BUSINESS AND INDUSTRY.

INSTITUTION CODE: BBB15099

SPONSORING AGENCY CODE: BBB06039

DESCRIPTOR: AIR POLLUTION CONTROL; BUSINESS; *CAREER OPPORTUNITIES; *EDUCATIONAL PROGRAMS; ENERGY; ENVIRONMENT; INDUSTRY; *MANPOWER NEEDS; PESTICIDES; *POLLUTION; POST SECONDARY EDUCATION; RADIATION; *STATE LEGISLATION; WATER POLLUTION CONTROL; NOISE; SOLID WASTES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$3.50 PLUS POSTAGE.

DESCRIPTIVE NOTE: 74P.; FOR RELATED DOCUMENTS, SEE SE 023 292-360

ISSUE: RIEAPR78

ABSTRACT: THIS REPORT PRESENTS AN INDICATION OF EXISTING WORKFORCE LEVELS AND CAREER POTENTIALS FOR ENVIRONMENTAL/ENERGY OCCUPATIONS WITHIN PRIVATE INDUSTRY. THE STUDY CONCERNS ITSELF WITH THE ENVIRONMENTAL POLLUTION CONTROL AREAS OF AIR, NOISE, POTABLE WATER, PESTICIDES, RADIATION, SOLID WASTE, WASTEWATER, AND ENERGY. THE FORMAT INCLUDES AN INTRODUCTION TO THE STUDY WITH APPROPRIATE DEFINITIONS, THE OBJECTIVES, THE SURVEY APPROACH AND RESULTS, AND CONCLUSIONS. A SELECTED BIBLIOGRAPHY IS INCLUDED FOR REFERENCE. (CS)

GRANT NUMBER: EPA-T-900591010

INSTITUTION NAME: NATIONAL FIELD RESEARCH CENTER INC., IOWA CITY, IOWA.

SPONSORING AGENCY NAME: ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, D. C.

ACCESSION NUMBER: ED147172

CLEARINGHOUSE ACCESSION NUMBER: SE023350

PUBLICATION DATE: 77

TITLE: NATIONAL ENVIRONMENTAL/ENERGY WORKFORCE ASSESSMENT: NATIONAL LEGISLATION.

INSTITUTION CODE: BBB15099

SPONSORING AGENCY CODE: BBB06039

DESCRIPTOR: AIR POLLUTION CONTROL; *CAREER OPPORTUNITIES; *EDUCATIONAL PROGRAMS; ENERGY; ENVIRONMENT; *FEDERAL LEGISLATION; *MANPOWER NEEDS; PESTICIDES; *POLLUTION; POST SECONDARY EDUCATION; RADIATION; STATE LEGISLATION; WATER POLLUTION CONTROL; NOISE; SOLID WASTES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$3.50 PLUS POSTAGE.

DESCRIPTIVE NOTE: 72P.; FOR RELATED DOCUMENTS, SEE SE 023 292-360

ISSUE: RIEAPR78

ABSTRACT: THIS REPORT PRESENTS ABSTRACTS OF FEDERAL ENVIRONMENTAL LEGISLATION IN EACH OF THE ENVIRONMENTAL POLLUTION CONTROL AREAS OF AIR, NOISE, POTABLE WATER, PESTICIDES, RADIATION, SOLID WASTE, WASTEWATER, AND ENERGY. AN ADDITIONAL SECTION OF THE REPORT OUTLINES RELATED ENVIRONMENTAL LEGISLATION CITATIONS FROM THE 1950'S TO THE PRESENT. THIS DOCUMENT IS ONE OF A SERIES OF 69 WHICH PRESENT INFORMATION FOR EACH OF THE STATES, WASHINGTON, D.C., PUERTO RICO, AND THE VIRGIN ISLANDS. (CS)

GRANT NUMBER: EPA-T-900591010

INSTITUTION NAME: NATIONAL FIELD RESEARCH CENTER INC., IOWA CITY, IOWA.

SPONSORING AGENCY NAME: ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, D. C.

ACCESSION NUMBER: ED147173

CLEARINGHOUSE ACCESSION NUMBER: SE023351

PUBLICATION DATE: 77

TITLE: NATIONAL ENVIRONMENTAL/ENERGY WORKFORCE ASSESSMENT FOR REGION I.

INSTITUTION CODE: BBB15099

SPONSORING AGENCY CODE: BBB06039

DESCRIPTOR: AIR POLLUTION CONTROL; *CAREER OPPORTUNITIES; *EDUCATIONAL PROGRAMS; ENERGY; ENVIRONMENT; *MANPOWER NEEDS; NATIONAL SURVEYS; PESTICIDES; *POLLUTION; POST SECONDARY EDUCATION; RADIATION; *STATE LEGISLATION; WATER POLLUTION CONTROL; NOISE; SOLID WASTES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$11.37 PLUS POSTAGE.

DESCRIPTIVE NOTE: 201P.; FOR RELATED DOCUMENTS, SEE SE 023 292-360; CONTAINS OCCASIONAL SMALL PRINT IN TABLES

ISSUE: RIEAPR78

ABSTRACT: THIS REPORT REPRESENTS A DETAILED SUMMATION OF EXISTING WORKFORCE LEVELS, TRAINING PROGRAMS, CAREER POTENTIAL, AND STAFFING LEVEL PROJECTIONS THROUGH 1981 FOR EPA REGION I. THIS REGION SERVES THE SIX CONTIGUOUS STATES OF THE NEW ENGLAND AREA: CONNECTICUT, MAINE, MASSACHUSETTS, NEW HAMPSHIRE, RHODE ISLAND, AND VERMONT. THE SPECIFIC POLLUTION PROGRAMS CONSIDERED INCLUDE AIR, NOISE, PESTICIDES, POTABLE WATER, RADIATION, SOLID WASTE, AND WASTEWATER. ADDITIONALLY, A SECTION OVERVIEWING CURRENT ACTIVITIES IN ENERGY AS IT RELATES TO POLLUTION CONTROL AND ABATEMENT IS INCLUDED. THE CONTENT OF EACH SECTION IS LIMITED TO THE CONTROL AUTHORITY WHICH EPA POSSESSES. THE STUDY WAS UNDERTAKEN TO PROVIDE A STRATEGY FOR SUPPORTING AND IMPLEMENTING ENVIRONMENTAL EDUCATION AND CAREER TRAINING PROGRAMS BASED ON NEEDS AND GROWTH TRENDS EVIDENCED BY THE INITIAL WORKFORCE ASSESSMENT. A SELECTED BIBLIOGRAPHY IS INCLUDED FOR REFERENCE. (CS)

GRANT NUMBER: EPA-T-900591010

INSTITUTION NAME: NATIONAL FIELD RESEARCH CENTER INC., IOWA CITY, IOWA.

SPONSORING AGENCY NAME: ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, D. C.

ACCESSION NUMBER: ED147174

CLEARINGHOUSE ACCESSION NUMBER: SE023352

PUBLICATION DATE: 77

TITLE: NATIONAL ENVIRONMENTAL/ENERGY WORKFORCE ASSESSMENT FOR REGION II.

INSTITUTION CODE: BBB15099

SPONSORING AGENCY CODE: BBB06039

DESCRIPTOR: AIR POLLUTION CONTROL; *CAREER OPPORTUNITIES; *EDUCATIONAL PROGRAMS; ENERGY; ENVIRONMENT; *MANPOWER NEEDS; NATIONAL SURVEYS; PESTICIDES; *POLLUTION; POST SECONDARY EDUCATION; RADIATION; *STATE LEGISLATION; WATER POLLUTION CONTROL; NOISE; SOLID WASTES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$6.01 PLUS POSTAGE.

DESCRIPTIVE NOTE: 109P.; FOR RELATED DOCUMENTS, SEE SE 023 292-360

ISSUE: RIEAPR78

ABSTRACT: THIS REPORT REPRESENTS A DETAILED SUMMATION OF EXISTING WORKFORCE LEVELS, TRAINING PROGRAMS, CAREER POTENTIAL, AND STAFF LEVEL PROJECTIONS THROUGH 1981 FOR EPA REGION II. THIS REGION SERVES THE STATES OF NEW YORK AND NEW JERSEY AND ALSO INCLUDES THE COMMONWEALTH OF PUERTO RICO AND THE VIRGIN ISLANDS. THE SPECIFIC POLLUTION PROGRAMS CONSIDERED INCLUDE AIR, NOISE, PESTICIDES, POTABLE WATER, RADIATION, SOLID WASTE, AND WASTEWATER. ADDITIONALLY, A SECTION OVERVIEWING CURRENT ACTIVITIES IN ENERGY AS IT RELATES TO POLLUTION CONTROL AND ABATEMENT IS INCLUDED. THE CONTENT OF EACH SECTION IS LIMITED TO THE CONTROL AUTHORITY WHICH EPA POSSESSES. THE STUDY WAS UNDERTAKEN TO PROVIDE A STRATEGY FOR SUPPORTING AND IMPLEMENTING ENVIRONMENTAL EDUCATION AND CAREER TRAINING PROGRAMS BASED ON NEEDS AND GROWTH TRENDS EVIDENCED BY THE INITIAL WORKFORCE ASSESSMENT. A SELECTED BIBLIOGRAPHY IS INCLUDED FOR REFERENCE. (CS)

GRANT NUMBER: EPA-T-900591010

INSTITUTION NAME: NATIONAL FIELD RESEARCH CENTER INC., IOWA CITY, IOWA.

SPONSORING AGENCY NAME: ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, D. C.

ACCESSION NUMBER: ED147175

CLEARINGHOUSE ACCESSION NUMBER: SE023353

PUBLICATION DATE: 77

TITLE: NATIONAL ENVIRONMENTAL/ENERGY WORKFORCE ASSESSMENT FOR REGION III.

INSTITUTION CODE: BBB15099

SPONSORING AGENCY CODE: BBB06039

DESCRIPTOR: AIR POLLUTION CONTROL; *CAREER OPPORTUNITIES; *EDUCATIONAL PROGRAMS; ENERGY; ENVIRONMENT; *MANPOWER NEEDS; NATIONAL SURVEYS; PESTICIDES; *POLLUTION; POST SECONDARY EDUCATION; RADIATION; *STATE LEGISLATION; WATER POLLUTION CONTROL; NOISE; SOLID WASTES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$6.01 PLUS POSTAGE.

DESCRIPTIVE NOTE: 115P.; FOR RELATED DOCUMENTS, SEE SE 023 292-360 ; FIGURES MAY BE MARGINALLY LEGIBLE

ISSUE: RIEAPR78

ABSTRACT: THIS REPORT REPRESENTS A DETAILED SUMMATION OF EXISTING WORKFORCE LEVELS, TRAINING PROGRAMS, CAREER POTENTIAL, AND STAFFING LEVEL PROJECTIONS THROUGH 1981 FOR EPA REGION III. THIS REGION SERVES THE MIDDLE ATLANTIC STATES OF DELAWARE, MARYLAND, PENNSYLVANIA, VIRGINIA, WEST VIRGINIA, AND THE DISTRICT OF COLUMBIA. THE SPECIFIC POLLUTION PROGRAMS CONSIDERED INCLUDE AIR, NOISE, PESTICIDES, POTABLE WATER, RADIATION, SOLID WASTE, AND WASTEWATER. ADDITIONALLY, A SECTION OVERVIEWING CURRENT ACTIVITIES IN ENERGY AS IT RELATES TO POLLUTION CONTROL AND ABATEMENT IS INCLUDED. THE CONTENT OF EACH SECTION IS LIMITED TO THE CONTROL AUTHORITY WHICH EPA POSSESSES. THE STUDY WAS UNDERTAKEN TO PROVIDE A STRATEGY FOR SUPPORTING AND IMPLEMENTING ENVIRONMENTAL EDUCATION AND CAREER TRAINING PROGRAMS BASED ON NEEDS AND GROWTH TRENDS EVIDENCED BY THE INITIAL WORKFORCE ASSESSMENT. A SELECTED BIBLIOGRAPHY IS INCLUDED FOR REFERENCE. (CS)

GRANT NUMBER: EPA-T-900591010

INSTITUTION NAME: NATIONAL FIELD RESEARCH CENTER INC., IOWA CITY, IOWA.

SPONSORING AGENCY NAME: ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, D. C.

ACCESSION NUMBER: ED147176

CLEARINGHOUSE ACCESSION NUMBER: SE023354

PUBLICATION DATE: 77

TITLE: NATIONAL ENVIRONMENTAL/ENERGY WORKFORCE ASSESSMENT FOR REGION IV.

INSTITUTION CODE: BBB15099

SPONSORING AGENCY CODE: BBB06039

DESCRIPTOR: AIR POLLUTION CONTROL; *CAREER OPPORTUNITIES; *EDUCATIONAL PROGRAMS; ENERGY; ENVIRONMENT; *MANPOWER NEEDS; NATIONAL SURVEYS; PESTICIDES; *POLLUTION; POST SECONDARY EDUCATION; RADIATION; *STATE LEGISLATION; WATER POLLUTION CONTROL; NOISE; SOLID WASTES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$7.35 PLUS POSTAGE.

DESCRIPTIVE NOTE: 143P.; FOR RELATED DOCUMENTS, SEE SE 023 292-360 ; FIGURES MAY BE MARGINALLY LEGIBLE

ISSUE: RIEAPR78

ABSTRACT: THIS REPORT REPRESENTS A DETAILED SUMMATION OF EXISTING WORKFORCE LEVELS, TRAINING PROGRAMS, CAREER POTENTIAL, AND STAFFING LEVEL PROJECTIONS THROUGH 1981 FOR EPA REGION IV. THIS REGION SERVES THE EIGHT SOUTHEASTERN STATES OF ALABAMA, FLORIDA, GEORGIA, KENTUCKY, MISSISSIPPI, NORTH CAROLINA, SOUTH CAROLINA, AND TENNESSEE. THE SPECIFIC POLLUTION PROGRAMS CONSIDERED INCLUDE AIR, NOISE, PESTICIDES, POTABLE WATER, RADIATION, SOLID WASTE, AND WASTEWATER. ADDITIONALLY, A SECTION OVERVIEWING CURRENT ACTIVITIES IN ENERGY AS IT RELATES TO POLLUTION CONTROL AND ABATEMENT IS INCLUDED. THE CONTENT OF EACH SECTION IS LIMITED TO THE CONTROL AUTHORITY WHICH EPA POSSESSES. THE STUDY WAS UNDERTAKEN TO PROVIDE A STRATEGY FOR SUPPORTING AND IMPLEMENTING ENVIRONMENTAL EDUCATION AND CAREER TRAINING PROGRAMS BASED ON NEEDS AND GROWTH TRENDS EVIDENCED BY THE INITIAL WORKFORCE ASSESSMENT. A SELECTED BIBLIOGRAPHY IS INCLUDED FOR REFERENCE. (CS)

GRANT NUMBER: EPA-T-900591010

INSTITUTION NAME: NATIONAL FIELD RESEARCH CENTER INC., IOWA CITY, IOWA.

SPONSORING AGENCY NAME: ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, D. C.

ACCESSION NUMBER: ED147177

CLEARINGHOUSE ACCESSION NUMBER: SE023355

PUBLICATION DATE: 77

TITLE: NATIONAL ENVIRONMENTAL/ENERGY WORKFORCE ASSESSMENT FOR REGION V.

INSTITUTION CODE: BBB15099

SPONSORING AGENCY CODE: BBB06039

DESCRIPTOR: AIR POLLUTION CONTROL; *CAREER OPPORTUNITIES; *EDUCATIONAL PROGRAMS; ENERGY; ENVIRONMENT; *MANPOWER NEEDS; NATIONAL SURVEYS; PESTICIDES; *POLLUTION; POST SECONDARY EDUCATION; RADIATION; *STATE LEGISLATION; WATER POLLUTION CONTROL; NOISE; SOLID WASTES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$4.67 PLUS POSTAGE.

DESCRIPTIVE NOTE: 99P.; FOR RELATED DOCUMENTS, SEE SE 023 292-360

ISSUE: RIEAPR78

ABSTRACT: THIS REPORT REPRESENTS A DETAILED SUMMATION OF EXISTING WORKFORCE LEVELS, TRAINING PROGRAMS, CAREER POTENTIAL, AND STAFFING LEVEL PROJECTIONS THROUGH 1981 FOR EPA REGION V. THIS REGION SERVES THE SIX EAST-NORTH CENTRAL STATES OF ILLINOIS, INDIANA, MICHIGAN, MINNESOTA, OHIO, AND WISCONSIN. THE SPECIFIC POLLUTION PROGRAMS CONSIDERED INCLUDE AIR, NOISE, PESTICIDES, POTABLE WATER, RADIATION, SOLID WASTE, AND WASTEWATER. THE CONTENT OF EACH SECTION IS LIMITED TO THE CONTROL AUTHORITY WHICH EPA POSSESSES. THE STUDY WAS UNDERTAKEN TO PROVIDE A STRATEGY FOR SUPPORTING AND IMPLEMENTING ENVIRONMENTAL EDUCATION AND CAREER TRAINING PROGRAMS BASED ON NEEDS AND GROWTH TRENDS EVIDENCED BY THE INITIAL WORKFORCE ASSESSMENT. A SELECTED BIBLIOGRAPHY IS INCLUDED FOR REFERENCE. (CS)

GRANT NUMBER: EPA-T-900591010

INSTITUTION NAME: NATIONAL FIELD RESEARCH CENTER INC., IOWA CITY, IOWA.

SPONSORING AGENCY NAME: ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, D. C.

ACCESSION NUMBER: ED147178

CLEARINGHOUSE ACCESSION NUMBER: SE023356

PUBLICATION DATE: 77

TITLE: NATIONAL ENVIRONMENTAL/ENERGY WORKFORCE ASSESSMENT FOR REGION VI.

INSTITUTION CODE: BBB15099

SPONSORING AGENCY CODE: BBB06039

DESCRIPTOR: AIR POLLUTION CONTROL; *CAREER OPPORTUNITIES; *EDUCATIONAL PROGRAMS; ENERGY; ENVIRONMENT; *MANPOWER NEEDS; NATIONAL SURVEYS; PESTICIDES; *POLLUTION; POST SECONDARY EDUCATION; RADIATION; *STATE LEGISLATION; WATER POLLUTION CONTROL; NOISE; SOLID WASTES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$6.01 PLUS POSTAGE.

DESCRIPTIVE NOTE: 112P.; FOR RELATED DOCUMENTS, SEE SE 023 292-360

ISSUE: RIEAPR78

ABSTRACT: THIS REPORT REPRESENTS A DETAILED SUMMATION OF EXISTING WORKFORCE LEVELS, TRAINING PROGRAMS, CAREER POTENTIAL, AND STAFFING LEVEL PROJECTIONS THROUGH 1981 FOR EPA REGION VI. THIS REGION SERVES THE GULF FRINGE STATES OF TEXAS, ARKANSAS, NEW MEXICO, OKLAHOMA, AND LOUISIANA. THE SPECIFIC POLLUTION PROGRAMS CONSIDERED INCLUDE AIR, NOISE, PESTICIDES, POTABLE WATER, RADIATION, SOLID WASTE, AND WASTEWATER. ADDITIONALLY, A SECTION OVERVIEWING CURRENT ACTIVITIES IN ENERGY AS IT RELATES TO POLLUTION CONTROL AND ABATEMENT IS INCLUDED. THE CONTENT OF EACH SECTION IS LIMITED TO THE CONTROL AUTHORITY WHICH EPA POSSESSES. THE STUDY WAS UNDERTAKEN TO PROVIDE A STRATEGY FOR SUPPORTING AND IMPLEMENTING ENVIRONMENTAL EDUCATION AND CAREER TRAINING PROGRAMS BASED ON NEEDS AND GROWTH TRENDS EVIDENCED BY THE INITIAL WORKFORCE ASSESSMENT. A SELECTED BIBLIOGRAPHY IS INCLUDED FOR REFERENCE. (CS)

GRANT NUMBER: EPA-T-900591010

INSTITUTION NAME: NATIONAL FIELD RESEARCH CENTER INC., IOWA CITY, IOWA.

SPONSORING AGENCY NAME: ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, D. C.

ACCESSION NUMBER: ED147179

CLEARINGHOUSE ACCESSION NUMBER: SE023357

PUBLICATION DATE: 77

TITLE: NATIONAL ENVIRONMENTAL/ENERGY WORKFORCE ASSESSMENT FOR REGION VII.

INSTITUTION CODE: BBB15099

SPONSORING AGENCY CODE: BBB06039

DESCRIPTOR: AIR POLLUTION CONTROL; *CAREER OPPORTUNITIES; *EDUCATIONAL PROGRAMS; ENERGY; ENVIRONMENT; *MANPOWER NEEDS; NATIONAL SURVEYS; PESTICIDES; *POLLUTION; POST SECONDARY EDUCATION; RADIATION; *STATE LEGISLATION; WATER POLLUTION CONTROL; NOISE; SOLID WASTES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$6.01 PLUS POSTAGE.

DESCRIPTIVE NOTE: 165P.; FOR RELATED DOCUMENTS, SEE SE 023 292-360

ISSUE: RIEAPR78

ABSTRACT: THIS REPORT REPRESENTS A DETAILED SUMMATION OF EXISTING WORKFORCE LEVELS, TRAINING PROGRAMS, CAREER POTENTIAL, AND STAFFING LEVEL PROJECTIONS THROUGH 1981 FOR EPA REGION VII. THIS REGION SERVES THE STATES OF IOWA, KANSAS, MISSOURI, AND NEBRASKA. THE SPECIFIC POLLUTION PROGRAMS CONSIDERED INCLUDE AIR, NOISE, PESTICIDES, POTABLE WATER, RADIATION, SOLID WASTE, AND WASTEWATER. THE CONTENT OF EACH SECTION IS LIMITED TO THE CONTROL AUTHORITY WHICH EPA POSSESSES. THE STUDY WAS UNDERTAKEN TO PROVIDE A STRATEGY FOR SUPPORTING AND IMPLEMENTING ENVIRONMENTAL EDUCATION AND CAREER TRAINING PROGRAMS BASED ON NEEDS AND GROWTH TRENDS EVIDENCED BY THE INITIAL WORKFORCE ASSESSMENT. A SELECTED BIBLIOGRAPHY IS INCLUDED FOR REFERENCE. (CS)

GRANT NUMBER: EPA-T-900591010

INSTITUTION NAME: NATIONAL FIELD RESEARCH CENTER INC., IOWA CITY, IOWA.

SPONSORING AGENCY NAME: ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, D. C.

ACCESSION NUMBER: ED147180

CLEARINGHOUSE ACCESSION NUMBER: SE023358

PUBLICATION DATE: 77

TITLE: NATIONAL ENVIRONMENTAL/ENERGY WORKFORCE ASSESSMENT FOR REGION VIII.

INSTITUTION CODE: BBB15099

SPONSORING AGENCY CODE: BBB06039

DESCRIPTOR: AIR POLLUTION CONTROL; *CAREER OPPORTUNITIES; *EDUCATIONAL PROGRAMS; ENERGY; ENVIRONMENT; *MANPOWER NEEDS; NATIONAL SURVEYS; PESTICIDES; *POLLUTION; POST SECONDARY EDUCATION; RADIATION; *STATE LEGISLATION; WATER POLLUTION CONTROL; NOISE; SOLID WASTES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$6.01 PLUS POSTAGE.

DESCRIPTIVE NOTE: 106P.; FOR RELATED DOCUMENTS, SEE SE 023 292-360

ISSUE: RIEAPR78

ABSTRACT: THIS REPORT REPRESENTS A DETAILED SUMMATION OF EXISTING WORKFORCE LEVELS, TRAINING PROGRAMS, CAREER POTENTIAL, AND STAFFING LEVEL PROJECTIONS THROUGH 1981 FOR EPA REGION VIII. THIS REGION SERVES THE ROCKY MOUNTAIN - PRAIRIE REGION AND INCLUDES THE STATES OF COLORADO, MONTANA, WYOMING, UTAH, NORTH DAKOTA, AND SOUTH DAKOTA. THE SPECIFIC POLLUTION PROGRAMS CONSIDERED INCLUDE AIR, NOISE, PESTICIDES, POTABLE WATER, RADIATION, SOLID WASTE, AND WASTEWATER. ADDITIONALLY, A SECTION OVERVIEWING CURRENT ACTIVITIES IN ENERGY AS IT RELATES TO POLLUTION CONTROL AND ABATEMENT IS INCLUDED. THE CONTENT OF EACH SECTION IS LIMITED TO THE CONTROL AUTHORITY WHICH EPA POSSESSES. THE STUDY WAS UNDERTAKEN TO PROVIDE A STRATEGY FOR SUPPORTING AND IMPLEMENTING ENVIRONMENTAL EDUCATION AND CAREER TRAINING PROGRAMS BASED ON NEEDS AND GROWTH TRENDS EVIDENCED BY THE INITIAL WORKFORCE ASSESSMENT. A SELECTED BIBLIOGRAPHY IS INCLUDED FOR REFERENCE. (CS)

GRANT NUMBER: EPA-T-900591010

INSTITUTION NAME: NATIONAL FIELD RESEARCH CENTER INC., IOWA CITY, IOWA.

SPONSORING AGENCY NAME: ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, D. C.

ACCESSION NUMBER: ED147181

CLEARINGHOUSE ACCESSION NUMBER: SE023359

PUBLICATION DATE: 77

TITLE: NATIONAL ENVIRONMENTAL/ENERGY WORKFORCE ASSESSMENT FOR REGION IX.

INSTITUTION CODE: BBB15099

SPONSORING AGENCY CODE: BBB06039

DESCRIPTOR: AIR POLLUTION CONTROL; *CAREER OPPORTUNITIES; *EDUCATIONAL PROGRAMS; ENERGY; ENVIRONMENT; *MANPOWER NEEDS; NATIONAL SURVEYS; PESTICIDES; *POLLUTION; POST SECONDARY EDUCATION; RADIATION; *STATE LEGISLATION; WATER POLLUTION CONTROL; NOISE; SOLID WASTES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$4.67 PLUS POSTAGE.

DESCRIPTIVE NOTE: 83P.; FOR RELATED DOCUMENTS, SEE SE 023 292-360 ; FIGURES MAY REPRODUCE POORLY

ISSUE: RIEAPR78

ABSTRACT: THIS REPORT REPRESENTS A DETAILED SUMMATION OF EXISTING WORKFORCE LEVELS, TRAINING PROGRAMS, CAREER POTENTIAL, AND STAFFING LEVEL PROJECTIONS THROUGH 1981 FOR EPA REGION IX. THIS REGION SERVES THE STATES OF ARIZONA, CALIFORNIA, HAWAII, AND NEVADA. THE SPECIFIC POLLUTION PROGRAMS CONSIDERED INCLUDE AIR, NOISE, PESTICIDES, POTABLE WATER, RADIATION SOLID WASTE, AND WASTEWATER. THE CONTENT OF EACH SECTION IS LIMITED TO THE CONTROL AUTHORITY WHICH EPA POSSESSES. THE STUDY WAS UNDERTAKEN TO PROVIDE A STRATEGY FOR SUPPORTING AND IMPLEMENTING ENVIRONMENTAL EDUCATION AND CAREER TRAINING PROGRAMS BASED ON NEEDS AND GROWTH TRENDS EVIDENCED BY THE INITIAL WORKFORCE ASSESSMENT. A SELECTED BIBLIOGRAPHY IS INCLUDED FOR REFERENCE. (CS)

GRANT NUMBER: EPA-T-900591010

INSTITUTION NAME: NATIONAL FIELD RESEARCH CENTER INC., IOWA CITY, IOWA.

SPONSORING AGENCY NAME: ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, D. C.

ACCESSION NUMBER: ED147182

CLEARINGHOUSE ACCESSION NUMBER: SE023360

PUBLICATION DATE: 77

TITLE: NATIONAL ENVIRONMENTAL/ENERGY WORKFORCE ASSESSMENT FOR REGION X.

INSTITUTION CODE: BBB15099

SPONSORING AGENCY CODE: BBB06039

DESCRIPTOR: AIR POLLUTION CONTROL; *CAREER OPPORTUNITIES; *EDUCATIONAL PROGRAMS; ENERGY; ENVIRONMENT; *MANPOWER NEEDS; NATIONAL SURVEYS; PESTICIDES; *POLLUTION; POST SECONDARY EDUCATION; RADIATION; *STATE LEGISLATION; WATER POLLUTION CONTROL; NOISE; SOLID WASTES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$6.01 PLUS POSTAGE.

DESCRIPTIVE NOTE: 101P.; FOR RELATED DOCUMENTS, SEE SE 023 292-359 ; FIGURES MAY REPRODUCE POORLY

ISSUE: RIEAPR78

ABSTRACT: THIS REPORT REPRESENTS A DETAILED SUMMATION OF EXISTING WORKFORCE LEVELS, TRAINING PROGRAMS, CAREER POTENTIAL, AND STAFFING LEVEL PROJECTIONS THROUGH 1981 FOR EPA REGION X. THIS REGION SERVES THE STATES OF ALASKA, IDAHO, OREGON, AND WASHINGTON. THE SPECIFIC POLLUTION PROGRAMS CONSIDERED INCLUDE AIR, NOISE, PESTICIDES, POTABLE WATER, RADIATION, SOLID WASTE, AND WASTEWATER. ADDITIONALLY, A SECTION OVERVIEWING CURRENT ACTIVITIES IN ENERGY AS IT RELATES TO POLLUTION CONTROL AND ABATEMENT IS INCLUDED. THE CONTENT OF EACH SECTION IS LIMITED TO THE CONTROL AUTHORITY WHICH EPA POSSESSES. THE STUDY WAS UNDERTAKEN TO PROVIDE A STRATEGY FOR SUPPORTING AND IMPLEMENTING ENVIRONMENTAL EDUCATION AND CAREER TRAINING PROGRAMS BASED ON NEEDS AND

GROWTH TRENDS EVIDENCED BY THE INITIAL WORKFORCE ASSESSMENT. A SELECTED BIBLIOGRAPHY IS INCLUDED FOR REFERENCE. (CS)

GRANT NUMBER: EPA-T-900591010

INSTITUTION NAME: NATIONAL FIELD RESEARCH CENTER INC., IOWA CITY, IOWA.

SPONSORING AGENCY NAME: ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, D. C.

ACCESSION NUMBER: ED147187

CLEARINGHOUSE ACCESSION NUMBER: SE023370

PUBLICATION DATE: SEP 77

TITLE: VOCATIONAL AND INDUSTRIAL ARTS PACKETS.

INSTITUTION CODE: BBB15068

SPONSORING AGENCY CODE: RM066000

DESCRIPTOR: CONSERVATION EDUCATION; *ENERGY CONSERVATION; *ENVIRONMENTAL EDUCATION; *INDUSTRIAL ARTS; INSTRUCTIONAL MATERIALS; LEARNING ACTIVITIES; RESOURCE MATERIALS; SECONDARY EDUCATION; *TEACHING GUIDES; *VOCATIONAL EDUCATION; ENVIRONMENTAL ENERGY EDUCATION PROJECT

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 150P.; FOR RELATED DOCUMENTS, SEE SE 023 371 AND SE 023 458-459; NOT AVAILABLE IN HARD COPY DUE TO MARGINAL LEGIBILITY OF ORIGINAL DOCUMENT

ISSUE: RIEAPR78

ABSTRACT: THIS BOOK IS A TEACHER'S GUIDE TO ENERGY ALTERNATIVES. IT IS DIVIDED INTO SEVEN INFORMATIONAL PACKETS ON THE FOLLOWING TOPICS: PARABOLIC SOLAR CONCENTRATORS, SOLAR FLAT PLATE COLLECTORS, WOOD AS FUEL, HEAT LOSS, BIO-GAS, WIND, AND WATER. EACH PACKET CONTAINS BACKGROUND INFORMATION FOR THE TEACHERS AND LEARNING ACTIVITIES FOR THE STUDENTS. THE TEACHER'S SECTION HAS A BIBLIOGRAPHY WITH THE USUAL ANNOTATION INFORMATION. THE STUDENT ACTIVITY SECTION INCLUDES A DETAILED DESCRIPTION OF THE ACTIVITY, USUALLY WITH ILLUSTRATIONS, AND A LIST OF THE MATERIALS, TIME, AND MONEY NEEDED TO COMPLETE THE ACTIVITY. THESE ACTIVITIES ARE DESIGNED FOR SECONDARY SCHOOL VOCATIONAL AND INDUSTRIAL ARTS STUDENTS. (MA)

GRANT NUMBER: OOG760203A

BUREAU NUMBER: 522AH60002

INSTITUTION NAME: MAINE AUDUBON SOCIETY, FALMOUTH.

SPONSORING AGENCY NAME: OFFICE OF EDUCATION (DHEW), WASHINGTON, D.C.

ACCESSION NUMBER: ED147188

CLEARINGHOUSE ACCESSION NUMBER: SE023371

PUBLICATION DATE: SEP 77

TITLE: SCIENCE PACKETS.

INSTITUTION CODE: BBB15068

SPONSORING AGENCY CODE: RM066000

DESCRIPTOR: ENERGY CONSERVATION; *ENVIRONMENTAL EDUCATION; *INSTRUCTIONAL MATERIALS; LEARNING ACTIVITIES; NATURAL RESOURCES; REFERENCE MATERIALS; *RESOURCE MATERIALS; SCIENCE EDUCATION; *SECONDARY EDUCATION; *TEACHING GUIDES; ENVIRONMENTAL ENERGY EDUCATION PROJECT

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 89P.; FOR RELATED DOCUMENTS, SEE SE 023 370 AND SE 023 458-459; NOT AVAILABLE IN HARD COPY DUE TO MARGINAL LEGIBILITY OF ORIGINAL DOCUMENT

ISSUE: RIEAPR78

ABSTRACT: THIS PUBLICATION IS AN ENERGY GUIDE FOR TEACHERS. IT CONTAINS DISCUSSIONS AND ILLUSTRATIONS OF FIVE MAJOR TOPICS: THE SUN'S RADIANT ENERGY, SOLAR COLLECTION, SOLAR CELLS, BIOCONVERSION (WOOD, GRAINS, WASTE), AND WIND. EACH SECTION INCLUDES A LISTING OF THE CONCEPTS CONTAINED WITHIN AND A BRIEF DISCUSSION-EXPLANATION SECTION. THERE IS A SHORT BIBLIOGRAPHY INCLUDED. (MA)

GRANT NUMBER: OOG6702036

BUREAU NUMBER: 522AH60002

INSTITUTION NAME: MAINE AUDUBON SOCIETY, FALMOUTH.

SPONSORING AGENCY NAME: OFFICE OF EDUCATION (DHEW), WASHINGTON, D.C.

ACCESSION NUMBER: ED147217

CLEARINGHOUSE ACCESSION NUMBER: SO010442

PUBLICATION DATE: 77

TITLE: SAMPLE ENERGY CONSERVATION EDUCATION ACTIVITIES FOR ELEMENTARY SCHOOL STUDENTS.

PERSONAL AUTHOR: ALLEN, ROONEY P., ED.; LAHART, DAVID E., ED.

INSTITUTION CODE: HWP11200; HWP26325

DESCRIPTOR: CONSERVATION (ENVIRONMENT); *CONSERVATION EDUCATION; CURRICULUM DEVELOPMENT; CURRICULUM GUIDES; *DEPLETED RESOURCES; ELEMENTARY EDUCATION; ELEMENTARY SCHOOL CURRICULUM; *ENERGY; *ENERGY CONSERVATION; *LEARNING ACTIVITIES; PRIMARY GRADES; SCIENCE EXPERIMENTS; TEACHER DEVELOPED MATERIALS

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$3.50 PLUS POSTAGE.

DESCRIPTIVE NOTE: 59P.; PAGES 8 THROUGH 16 WERE REMOVED BY ERIC DUE TO POOR REPRODUCIBILITY; PAGE 55 HAS BEEN REMOVED BY ERIC DUE TO COPYRIGHT LAWS; THESE PAGES ARE NOT INCLUDED IN THE PAGINATION

ISSUE: RIEAPR78

ABSTRACT: THE BOOKLET CONTAINS LEARNING ACTIVITIES FOR INTRODUCING ENERGY AND CONSERVATION CONCEPTS INTO THE EXISTING ELEMENTARY SCHOOL CURRICULUM. THE ACTIVITIES WERE DEVELOPED BY PALM BEACH COUNTY TEACHERS DURING A ONE-WEEK WORKSHOP. A FRAMEWORK OF IDEAS IS DIVIDED INTO THREE FUNCTIONAL CATEGORIES: UNIVERSE OF ENERGY; LIVING SYSTEMS AND ENERGY, AND SOCIAL SYSTEMS AND ENERGY. THE FIRST TWO CATEGORIES OUTLINE SCIENTIFIC CONCEPTS FUNDAMENTAL TO AN UNDERSTANDING OF BASIC ENERGY IDEAS AND ENERGY FLOW MODELS OF WHICH HUMAN BEINGS ARE A PART. THE THIRD CATEGORY SETS FORTH BASIC CONCEPTS IN SOCIAL SYSTEMS, INCLUDING GUVERNMENTAL, ECONOMIC, AND MORAL SYSTEMS. THE UNDERSTANDING OF WHICH IS VITAL IN MAKING DECISIONS AFFECTING PRODUCTION, DISTRIBUTION, AND CONSUMPTION OF ENERGY RESOURCES. SIXTEEN SAMPLE LESSONS ARE PROVIDED FOR GRADES 1-3 AND 19 FOR GRADES 4-6. ACTIVITY IDEAS FOCUS ON TOPICS SUCH AS THE SUN AS A SOURCE OF ENERGY, FOSSIL ENERGY, AND CONSERVATION OF SCARCE RESOURCES. THE MAJORITY OF ACTIVITIES CONSISTS OF SCIENTIFIC EXPERIMENTS; OTHER ACTIVITIES INCLUDE PUZZLES, DRAWING EXERCISES, AND CUT AND PASTE ACTIVITIES. THE ACTIVITIES ARE SUGGESTIVE, RATHER THAN PRESCRIPTIVE; TEACHERS ARE ENCOURAGED TO ADAPT AND EXPAND THE ACTIVITIES. (DRS)

INSTITUTION NAME: FLORIDA STATE UNIV., TALLAHASSEE.; PALM BEACH COUNTY BOARD OF PUBLIC INSTRUCTION, WEST PALM BEACH, FLA.

ACCESSION NUMBER: ED147464

CLEARINGHOUSE ACCESSION NUMBER: CE012460

PUBLICATION DATE: 77

TITLE: ENERGY AND POWER TECHNOLOGY. CURRICULUM GUIDE.

INSTITUTION CODE: BBB04861

DESCRIPTOR: *CAREER EXPLORATION; CURRICULUM GUIDES; EDUCATIONAL OBJECTIVES; *ENERGY; *INDUSTRIAL ARTS; INDUSTRIAL EDUCATION; JUNIOR HIGH SCHOOLS; *LEARNING ACTIVITIES; MIDDLE SCHOOLS; *POWER MECHANICS; STATE CURRICULUM GUIDES; TEACHING GUIDES; TECHNOLOGY

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 102P.; FOR RELATED DOCUMENTS SEE CE 012 456-460

ISSUE: RIEMAY78

ABSTRACT: ONE OF A SET OF SIX GUIDES FOR AN INDUSTRIAL ARTS CURRICULUM AT THE JUNIOR HIGH SCHOOL LEVEL, THIS GUIDE PROVIDES THE BASIC FOUNDATION TO DEVELOP A ONE-SEMESTER COURSE BASED ON THE CLUSTER CONCEPT, ENERGY AND POWER TECHNOLOGY. THE GUIDE SUGGESTS MANIPULATIVE AND EXPERIMENTAL STUDENT-CONDUCTED ACTIVITIES OR TEACHER DEMONSTRATIONS WHICH FOCUS ON THE SOCIOECONOMIC AND ENVIRONMENTAL IMPACT OF ENERGY USAGE AND THE SAFETY, EFFICIENCY, AND OCCUPATIONAL ASPECTS INHERENT IN THE ENERGY/POWER (E/P) FIELD. FOLLOWING AN INTRODUCTION COVERING RATIONALE, CLUSTER OUTLINE AND OBJECTIVES, AND CLUSTER TAXONOMIC STRUCTURE, SEVEN UNITS ARE PRESENTED: INTRODUCTORY CONCEPTS, SAFETY CONCEPTS, ENERGY FORMS AND SOURCES, ENERGY HARNESSING SYSTEMS AND NEWTON'S LAWS, E/P TRANSMISSION AND CONTROL, E/P UTILIZATION, AND E/P CAREER OPPORTUNITIES. EACH UNIT INCLUDES UNIT OBJECTIVES, STUDENT COMPETENCIES AND RELATED STUDENT ACTIVITIES, UNIT OUTLINE, AND WHERE APPLICABLE, ILLUSTRATIONS AND INFORMATION SHEETS. (SH)

AVAILABILITY: INDUSTRIAL TECHNOLOGY DEPARTMENT, UNIVERSITY OF NORTH DAKOTA, GRAND FORKS, NORTH DAKOTA 58202 ($4.00; SET $15.00)

INSTITUTION NAME: NORTH DAKOTA STATE BOARD FOR VOCATIONAL EDUCATION, BISMARCK.

ACCESSION NUMBER: ED147581

CLEARINGHOUSE ACCESSION NUMBER: CE014021

PUBLICATION DATE: 77

TITLE: TRAVEL ON MINI-UNITS AND LEARNING ACTIVITIES ON TRANSPORTATION FOR GRADES K-3.

PERSONAL AUTHOR: LAWSON, JANE; AND OTHERS

INSTITUTION CODE: MGG00100

SPONSORING AGENCY CODE: BBB05702

DESCRIPTOR: BASIC SKILLS; CURRICULUM GUIDES; ELEMENTARY EDUCATION; *ELEMENTARY SCHOOL CURRICULUM; ENERGY CONSERVATION; ENVIRONMENTAL EDUCATION; GROUP ACTIVITIES; INDEPENDENT STUDY; KINDERGARTEN; *LEARNING ACTIVITIES; LESSON PLANS; MOTOR VEHICLES; PEDESTRIAN TRAFFIC; POLLUTION; PRIMARY EDUCATION; RESOURCE MATERIALS; *SAFETY EDUCATION; SERVICE VEHICLES; SKILL DEVELOPMENT; TRAFFIC REGULATIONS; *TRAFFIC SAFETY; TRAFFIC SIGNS; *TRANSPORTATION; VEHICULAR TRAFFIC

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$22.09 PLUS POSTAGE.

DESCRIPTIVE NOTE: 422P.; FOR RELATED DOCUMENTS SEE CE 014 021-032

ISSUE: RIEMAY78

ABSTRACT: ONE OF A SERIES OF ELEVEN CURRICULUM MANUALS WHICH COVER THE FOUR TRANSPORTATION TOPICS OF PUBLIC

TRANSPORTATION, TRANSPORTATION AND THE ENVIRONMENT, TRANSPORTATION SAFETY, AND BICYCLES FOR ELEMENTARY, SECONDARY, AND ADULT LEVELS. THIS MANUAL FOR GRADES K-3 COVERS ALL FOUR TOPICS. MATERIALS IN THE THIRTEEN MINI-UNITS PRESENT DIFFERENT ASPECTS OF THE FOUR TOPICS. EACH MINI-UNIT CONSISTS OF A LESSON PLAN COMPONENT, WHICH PROVIDES A SUGGESTED SEQUENCE OF LEARNING ACTIVITIES, AND AN INDIVIDUAL LEARNING ACTIVITIES COMPONENT WHICH DESCRIBES IN DETAIL HOW TO IMPLEMENT THE EXERCISES. TYPICAL MINI-UNITS FOCUS ON STREET SIGNS, EMERGENCY VEHICLES, LEARNING TO RIDE A BIKE, AND AN INTRODUCTION TO THE CONCEPTS OF POLLUTION AND ENERGY CONSERVATION. MOST UNITS PROVIDE OPPORTUNITY TO EXERCISE BASIC SKILLS IN LANGUAGE ARTS, MATHEMATICS, AND SOCIAL INTERACTION AND THUS MAY BE INTEGRATED WITH OTHER PARTS OF THE K-3 CURRICULUM. SUPPLEMENTARY ACTIVITIES ARE INCLUDED FOR EACH TOPIC WHICH OFFER ADDITIONAL LEARNING ACTIVITIES FOR INDEPENDENT USE; QUIZZES FOR ACTIVITY OR MINI-UNIT EVALUATION ARE ALSO INCLUDED. ALSO INCLUDED ARE INSTRUCTIONS FOR SELECTING AND CONDUCTING THE ACTIVITIES AND REFERENCES FOR FURTHER STUDY RESOURCES. MASTERS ARE INCLUDED FOR REPRODUCTION OF ROLE PROFILES, GAME BOARDS, MAPS, AND OTHER DISTRIBUTABLE MATERIALS. A CURRICULUM GUIDE, CE 014 028, IS ALSO AVAILABLE FOR USE WITH THE MANUALS. (TA)

CONTRACT NUMBER: DOT-OS-30086; DOT-OS-50026

INSTITUTION NAME: ABT ASSOCIATES, INC. CAMBRIDGE, MASS.

SPONSORING AGENCY NAME: OFFICE OF CONSUMER AFFAIRS, WASHINGTON, D.C.

ACCESSION NUMBER: ED147582

CLEARINGHOUSE ACCESSION NUMBER: CE014022

PUBLICATION DATE: 77

TITLE: TRAVEL ON MINI-UNITS AND LEARNING ACTIVITIES ON TRANSPORTATION FOR GRADES 4-6.

PERSONAL AUTHOR: LAWSON, JANE; AND OTHERS

INSTITUTION CODE: MGG00100

SPONSORING AGENCY CODE: [illegible]9702

DESCRIPTOR: BASIC SKILLS; CURRICULUM GUIDES; ELEMENTARY EDUCATION; ELEMENTARY SCHOOL CURRICULUM; ENERGY CONSERVATION; ENVIRONMENTAL EDUCATION; GROUP ACTIVITIES; INDEPENDENT STUDY; INTERMEDIATE GRADES; *LEARNING ACTIVITIES; LESSON PLANS; MOTOR VEHICLES; PEDESTRIAN TRAFFIC; POLLUTION; RESOURCE MATERIALS; *SAFETY EDUCATION; SERVICE VEHICLES; SKILL DEVELOPMENT; TRAFFIC REGULATIONS; *TRAFFIC SAFETY; TRAFFIC SIGNS; *TRANSPORTATION; *VEHICULAR TRAFFIC

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$24.77 PLUS POSTAGE.

DESCRIPTIVE NOTE: 456P.; FOR RELATED DOCUMENTS SEE CE 014 021-032

ISSUE: RIEMAY78

ABSTRACT: ONE OF A SERIES OF ELEVEN CURRICULUM MANUALS WHICH COVER THE FOUR TRANSPORTATION TOPICS OF PUBLIC TRANSPORTATION, TRANSPORTATION AND THE ENVIRONMENT, TRANSPORTATION SAFETY, AND BICYCLES FOR ELEMENTARY, SECONDARY, AND ADULT LEVELS. THIS MANUAL FOR GRADES 4-6 COVERS ALL FOUR TOPICS. MATERIALS IN FOUR CHAPTERS COMPRISING FOURTEEN MINI-UNITS COVER DIFFERENT ASPECTS OF EACH OF THE FOUR TOPICS. EACH MINI-UNIT CONSISTS OF A LESSON PLAN COMPONENT, WHICH PROVIDES A SUGGESTED SEQUENCE OF LEARNING ACTIVITIES, AND AN INDIVIDUAL LEARNING ACTIVITIES COMPONENT, WHICH DESCRIBES IN DETAIL HOW TO IMPLEMENT EACH EXERCISE. TYPICAL ELEMENTARY MINI-UNITS FOCUS ON STREET SIGNS, EMERGENCY VEHICLES, LEARNING TO RIDE A BIKE, AND AN INTRODUCTION TO THE CONCEPTS OF POLLUTION AND ENERGY CONSERVATION. MOST UNITS PROVIDE OPPORTUNITY TO EXERCISE BASIC SKILLS IN LANGUAGE ARTS, MATHEMATICS, AND SOCIAL INTERACTION. SUPPLEMENTARY ACTIVITIES ARE INCLUDED AT THE END OF EACH CHAPTER WHICH OFFER ADDITIONAL LEARNING ACTIVITIES FOR INDEPENDENT USE. ALSO INCLUDED ARE READINGS ON TRANSPORTATION AND THE ENVIRONMENT, A LIST OF REFERENCES FOR FURTHER STUDY RESOURCES, AND MASTERS FOR REPRODUCTION OF ROLE PROFILES, GAME BOARDS, MAPS, AND OTHER DISTRIBUTABLE MATERIALS. (A CURRICULUM GUIDE, CE 014 028, IS ALSO AVAILABLE FOR USE WITH THE MANUALS.) (TA)

CONTRACT NUMBER: DOT-OS-30086; DOT-OS-50026

INSTITUTION NAME: ABT ASSOCIATES, INC. CAMBRIDGE, MASS.

SPONSORING AGENCY NAME: OFFICE OF CONSUMER AFFAIRS, WASHINGTON, D.C.

ACCESSION NUMBER: ED147587

CLEARINGHOUSE ACCESSION NUMBER: CE014027

PUBLICATION DATE: 77

TITLE: TRANSPORTATION CONSUMER EDUCATION FOR ADULTS: MINI-UNITS AND LEARNING ACTIVITIES.

PERSONAL AUTHOR: FINN, PETER; AND OTHERS

INSTITUTION CODE: MGG00100

SPONSORING AGENCY CODE: BB805702

DESCRIPTOR: ADULT EDUCATION; *CONSUMER EDUCATION; CURRICULUM; CURRICULUM GUIDES; ENERGY CONSERVATION; *ENVIRONMENTAL EDUCATION; *LEARNING ACTIVITIES; LESSON PLANS; MOTOR VEHICLES; PEDESTRIAN TRAFFIC; POLLUTION; RESOURCE MATERIALS; *SAFETY EDUCATION; SERVICE VEHICLES; SKILL DEVELOPMENT; TRAFFIC REGULATIONS; *TRAFFIC SAFETY; TRAFFIC SIGNS; *TRANSPORTATION; VEHICULAR TRAFFIC

EDRS PRICE: EDRS PRICE MF-$1.00 HC-$30.13 PLUS POSTAGE.

DESCRIPTIVE NOTE: 565P.; FOR RELATED DOCUMENTS SEE CE 014 021-032

ISSUE: RIEMAY78

ABSTRACT: ONE OF A SERIES OF ELEVEN CURRICULUM MANUALS WHICH COVER THE FOUR TRANSPORTATION TOPICS OF PUBLIC TRANSPORTATION, TRANSPORTATION AND THE ENVIRONMENT, TRANSPORTATION SAFETY, AND BICYCLES FOR ELEMENTARY, SECONDARY, AND ADULT LEVELS. THIS MANUAL COVERS ALL FOUR TOPICS AT THE ADULT LEVEL. MATERIALS IN FOUR CHAPTERS COMPRISING SEVENTEEN MINI-UNITS PRESENT DIFFERENT ASPECTS OF THE FOUR TOPICS. EACH MINI-UNIT CONSISTS OF A LESSON PLAN COMPONENT AND AN INDIVIDUAL LEARNING ACTIVITIES COMPONENT. SOME TOPICS DEAL WITH BUYING AND MAINTAINING A CAR, CITIZEN PARTICIPATION TO RESOLVE CONFLICTS BETWEEN TRANSPORTATION AND THE ENVIRONMENT, BICYCLE BUYING, AND PROCEDURES FOR REGISTERING EFFECTIVE COMPLAINTS ABOUT PUBLIC TRANSIT PROBLEMS. ALSO INCLUDED ARE REFERENCES FOR FURTHER STUDY RESOURCES, SUGGESTIONS FOR INCORPORATING THE UNITS INTO A LARGER ADULT CURRICULUM, AND MASTERS FOR REPRODUCTION OF ROLE PROFILES, GAME BOARDS, MAPS, AND OTHER DISTRIBUTABLE MATERIALS. (A CURRICULUM GUIDE, CE 014 028, IS ALSO AVAILABLE FOR USE WITH THE MANUALS.) (TA)

CONTRACT NUMBER: DOT-OS-30086; DOT-OS-50026

INSTITUTION NAME: ABT ASSOCIATES, INC. CAMBRIDGE, MASS.

SPONSORING AGENCY NAME: OFFICE OF CONSUMER AFFAIRS, WASHINGTON, D.C.

ACCESSION NUMBER: ED147996

CLEARINGHOUSE ACCESSION NUMBER: EA010195

PUBLICATION DATE: 77

TITLE: ENERGY SOURCEBOOK FOR EDUCATIONAL FACILITIES.

INSTITUTION CODE: RUF19769

DESCRIPTOR: *BUILDING DESIGN; BUILDING IMPROVEMENT; *BUILDING OPERATION; COST EFFECTIVENESS; *EDUCATIONAL FACILITIES; ELEMENTARY SECONDARY EDUCATION; *ENERGY CONSERVATION; FACILITY UTILIZATION RESEARCH; FUEL CONSUMPTION; HEATING; HEAT RECOVERY; HIGHER EDUCATION; ILLUMINATION LEVELS; LIFE CYCLE COSTING; PROFESSIONAL PERSONNEL; RECORDKEEPING; *RESOURCE GUIDES; SOLAR RADIATION

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 275P.

ISSUE: RIEMAY78

ABSTRACT: THE COUNCIL OF EDUCATIONAL FACILITY PLANNERS, INTERNATIONAL (CEFP/I) HAS ASSEMBLED AN AUTHORITATIVE AND COMPREHENSIVE SOURCEBOOK FOR THE DESIGN AND MANAGEMENT OF ENERGY EFFICIENT EDUCATIONAL FACILITIES. INFORMATION THAT BRIDGES THE GAP BETWEEN SCIENTIFIC ENERGY THEORY/RESEARCH/TECHNOLOGY AND THE NEEDS OF THE EDUCATIONAL COMMUNITY IS PUBLISHED IN LOOSE-LEAF FORMAT TO PERMIT PERIODIC UPDATING OF UNITS. UNITS CONTAIN (1) CEFP/I ENERGY POLICY AND INITIAL IMPLEMENTATION PROCEDURES; (2) GUIDELINES FOR DEVELOPING AN ENERGY MANAGEMENT PLAN FOR LOCAL SCHOOL DISTRICTS; (3) ENERGY DATA COLLECTION, ANALYSIS, AND MONITORING SYSTEMS; (4) METHODS FOR CONDUCTING A PRELIMINARY FACILITY SURVEY, AND DESCRIPTIONS OF THREE ENERGY AUDITING PROGRAMS; (5) A LIST OF 20 NEW ENERGY FORM AND ENERGY CONSERVATION ITEMS READY FOR USE IN THE FACILITY DESIGN PROCESS AND AN ENERGY STUDY REPORT OF A SCHOOL THAT HAS USED THE ITEMS; (6) STATES' ROLE, WITH THE NORTH CAROLINA DEPARTMENT OF EDUCATION ENERGY CONSERVATION PLAN; (7) CONSERVATION MEASURES; (8) COST/BENEFITS OF CONSERVATION; (9) CONTRACTING FOR SERVICES; (10) PUBLIC RELATIONS; AND (11) CASE STUDIES. (AUTHOR/MLF)

AVAILABILITY: COUNCIL OF EDUCATIONAL FACILITY PLANNERS, INTERNATIONAL, 29 WEST WOODRUFF AVENUE, COLUMBUS, OHIO 43210 ($27.50 NON-MEMBERS; $25.00 CEFP MEMBERS)

INSTITUTION NAME: COUNCIL OF EDUCATIONAL FACILITY PLANNERS, COLUMBUS, OHIO.

ACCESSION NUMBER: ED148561

CLEARINGHOUSE ACCESSION NUMBER: SE022892

PUBLICATION DATE: 77

TITLE: ENVIRONMENTAL QUALITY: A COMMUNITY CONCERN. ENVIRONMENTAL EDUCATION SEMINARS. SEMINAR DESCRIPTIONS AND WORKSHEETS.

INSTITUTION CODE: BB814187; QPX82950

DESCRIPTOR: ADULT EDUCATION; *COMMUNITY ACTION; CONSERVATION EDUCATION; *ENVIRONMENTAL EDUCATION; *INSTRUCTIONAL MATERIALS; *LEARNING ACTIVITIES; NATURAL RESOURCES; POPULATION EDUCATION; SCIENCE EDUCATION; *SECONDARY EDUCATION; TEACHING GUIDES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$4.67 PLUS POSTAGE.

DESCRIPTIVE NOTE: 85P.

ISSUE: RIEMAY78

ABSTRACT: THIS PUBLICATION STRESSES THE IMPORTANCE OF COMMUNITY ACTION FOR ENVIRONMENTAL IMPROVEMENT. THE COMMUNITY ENVIRONMENTAL EDUCATION PROGRAM IS DESIGNED FOR HIGH SCHOOL STUDENTS AND FOR CONTINUING EDUCATION GROUPS. FOUR TOPICS RELATED TO THE QUALITY OF LIFE AND THE COMMUNITY ARE ADDRESSED: (1) GROWTH; (2) TRANSPORTATION; (3) LAND USE; AND (4) ENERGY CONSUMPTION. EACH OF THESE TOPICS IS SUBDIVIDED TO PROVIDE THE TEACHER WITH A SEMINAR DESCRIPTION, BACKGROUND INFORMATION, SUGGESTED PROCEDURES OR ACTIVITIES, AND WORKSHEETS. A LISTING OF RELATED RESOURCES IS ALSO INCLUDED. TEACHERS ARE ENCOURAGED TO DUPLICATE SOME OF THE MATERIALS, AND A PACKET OF INSERTS FROM THE TEXTBOOK IS PROVIDED FOR THIS PURPOSE. INSTRUCTIONAL MATERIALS DEVELOPED BY THE NEW YORK DEPARTMENT'S BUREAU OF GENERAL EDUCATION CURRICULUM DEVELOPMENT ARE LISTED IN THE BACK OF THE PUBLICATION. (MA)

INSTITUTION NAME: NEW YORK STATE EDUCATION DEPT., ALBANY. BUREAU OF GENERAL EDUCATION CURRICULUM DEVELOPMENT.; STATE UNIV. OF NEW YORK, ALBANY.

ACCESSION NUMBER: ED148593

CLEARINGHOUSE ACCESSION NUMBER: SE023424

PUBLICATION DATE: 77

TITLE: THE NATIONAL RESEARCH COUNCIL IN 1977: CURRENT ISSUES AND STUDIES.

INSTITUTION CODE: PGK56681

DESCRIPTOR: BEHAVIORAL SCIENCES; *EDUCATIONAL RESEARCH; ENERGY; ENVIRONMENT; FEDERAL GOVERNMENT; MEDICAL RESEARCH; NATURAL RESOURCES; *PHYSICAL SCIENCES; *RESEARCH PROJECTS; SCIENCES; *SCIENTIFIC RESEARCH; *SOCIAL SCIENCES; *NATIONAL RESEARCH COUNCIL

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$15.39 PLUS POSTAGE.

DESCRIPTIVE NOTE: 288P.; FOR 1976 EDITION, SEE ED 133 187; PHOTOGRAPHS MAY NOT REPRODUCE WELL ; CONTAINS OCCASIONAL SMALL TYPE

ISSUE: RIEMAY78

ABSTRACT: THIS SECOND ANNUAL REPORT OF THE NATIONAL RESEARCH COUNCIL (NRC) OFFERS VIEWS OF ITS OFFICERS ON NATIONAL ISSUES FROM THE VANTAGE OF THE NRC, AND DESCRIPTIONS OF STUDY PROJECTS IN PROGRESS. REPORTS ARE MADE BY THE NRC'S DIVISIONS OF: BEHAVIORAL AND SOCIAL SCIENCES, LIFE SCIENCES, ENGINEERING, MATHEMATICAL AND PHYSICAL SCIENCES, INTERNATIONAL RELATIONS, HUMAN RESOURCES, SOCIOTECHNICAL SYSTEMS, NATURAL RESOURCES, AND THE INSTITUTE OF MEDICINE. SEVENTEEN STUDIES IN PROGRESS ARE REVIEWED INCLUDING: RESEARCH RELEVANT TO EDUCATION, BEHAVIOR, MANPOWER, HEALTH CARE, WATER, GLOBAL ENERGY, BUILDING SCIENCE, SAFETY, RADIOACTIVE WASTE, OIL AND GAS RESEARCH, AND MEDICAL MALPRACTICE. (SL)

AVAILABILITY: OFFICE OF INFORMATION, NATIONAL ACADEMY OF SCIENCES, 2101 CONSTITUTION AVENUE, N.W., WASHINGTON, D.C. 20418 (NO PRICE QUOTED)

INSTITUTION NAME: NATIONAL ACADEMY OF SCIENCES - NATIONAL RESEARCH COUNCIL, WASHINGTON, D.C.

ACCESSION NUMBER: ED148600

CLEARINGHOUSE ACCESSION NUMBER: SE023467

PUBLICATION DATE: SEP 77

TITLE: TEXAS CONSERVATION GUIDE FOR MUNICIPAL SERVICES: A REPORT TO TEXAS CITIES.

PERSONAL AUTHOR: WALKER, JACILYN G.; DEHAVEN, MARTHA L.

INSTITUTION CODE: BB815173

SPONSORING AGENCY CODE: RM066000

DESCRIPTOR: BUSINESS; *CONSERVATION (ENVIRONMENT); CONSERVATION EDUCATION; *ENERGY; *ENERGY CONSERVATION; ENVIRONMENT; INDUSTRY; *NATURAL RESOURCES; SCIENTIFIC RESEARCH; URBAN STUDIES; *TEXAS

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$14.05 PLUS POSTAGE.

DESCRIPTIVE NOTE: 251P.

ISSUE: RIEMAY78

ABSTRACT: THIS DOCUMENT PRESENTS A COLLECTION OF ENERGY CONSERVATION IDEAS GATHERED FROM A SURVEY OF TEXAS CITIES AND VIA A NATIONAL SEARCH OF RECENT TECHNICAL INFORMATION. THE CONSERVATION IDEAS PRESENTED ARE GROUPED INTO CATEGORIES OF: ADMINISTRATIVE CONCERNS, PUBLIC BUILDINGS, PUBLIC VEHICLE FLEETS, TRANSPORTATION SYSTEMS, MUNICIPAL UTILITIES, ALTERNATE ENERGY SOURCES, AND OTHER CONSERVATION OPTIONS. EACH CONSERVATION IDEA PRESENTED INCLUDES AN INFORMATION SOURCE FROM WHICH MORE DETAILS PERTAINING TO THE IDEA MAY BE OBTAINED. (SL)

INSTITUTION NAME: TEXAS UNIV., ARLINGTON. INST. OF URBAN STUDIES.

SPONSORING AGENCY NAME: OFFICE OF EDUCATION (DHEW), WASHINGTON, D.C.

ACCESSION NUMBER: ED148609

CLEARINGHOUSE ACCESSION NUMBER: SE023489

PUBLICATION DATE: DEC 77

TITLE: A LEARNING PACKAGE IN ENERGY CONSERVATION FOR PARTICIPANTS IN THE HOME BUILDING INDUSTRY. FINAL REPORT.

INSTITUTION CODE: BB815203

SPONSORING AGENCY CODE: RM066000

DESCRIPTOR: *CONSERVATION (ENVIRONMENT); CONSERVATION EDUCATION; ECOLOGY; *EDUCATIONAL RESEARCH; *ENERGY; *ENERGY CONSERVATION; *ENVIRONMENTAL EDUCATION; NATURAL RESOURCES; REPORTS; SCIENCE EDUCATION; RESEARCH REPORTS

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$2.06 PLUS POSTAGE.

DESCRIPTIVE NOTE: 43P.; FOR RELATED DOCUMENT, SEE SE 023 490; CONTAINS OCCASIONAL PAGES OF MARGINAL LEGIBILITY

ISSUE: RIEMAY78

ABSTRACT: PRESENTED IS THE FINAL REPORT FOR A PROJECT DESIGNED TO DEVELOP AN EXPERIMENTAL LEARNING PACKAGE FOR EDUCATING PARTICIPANTS IN THE HOME BUILDING INDUSTRY IN ENERGY CONSERVATION. THE PROJECT ADDRESSES DEFICIENCIES IN THE PRESENT KNOWLEDGE STATUS OF MEMBERS OF THE HOME BUILDING INDUSTRY, EFFECTIVE MARKETING TECHNIQUES FOR ENERGY CONSERVING HOMES, AND ATTITUDINAL BARRIERS TOWARDS ADOPTION OF ENERGY CONSERVING HOMES. RESULTS INDICATE THAT THE EXPERIMENTAL LEARNING PACKAGE PRODUCED WAS EFFECTIVE IN INCREASING PARTICIPANT KNOWLEDGE AND ATTITUDES RELATED TO THE CONSERVATION OF ENERGY IN HOME BUILDING. (SL)

GRANT NUMBER: OE-G00-75-02108/557-BH-70004

INSTITUTION NAME: HOUSTON UNIV., TEX. COLLEGE OF ARCHITECTURE.

SPONSORING AGENCY NAME: OFFICE OF EDUCATION (DHEW), WASHINGTON, D.C.

ACCESSION NUMBER: ED148610

CLEARINGHOUSE ACCESSION NUMBER: SE023490

PUBLICATION DATE: DEC 77

TITLE: A LEARNING PACKAGE IN ENERGY CONSERVATION FOR PARTICIPANTS IN THE HOME BUILDING INDUSTRY. APPENDICES.

INSTITUTION CODE: BB815203

SPONSORING AGENCY CODE: RM066000

DESCRIPTOR: *CONSERVATION (ENVIRONMENT); CONSERVATION EDUCATION; ECOLOGY; *EDUCATIONAL RESEARCH; *ENERGY; *ENERGY CONSERVATION; *ENVIRONMENTAL EDUCATION; NATURAL RESOURCES; RESEARCH; SCIENCE EDUCATION; RESEARCH REPORTS

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$23.43 PLUS POSTAGE.

DESCRIPTIVE NOTE: 429P.; FOR RELATED DOCUMENT, SEE SE 023 489; CONTAINS OCCASIONAL PAGES OF MARGINAL LEGIBILITY

ISSUE: RIEMAY78

ABSTRACT: THIS DOCUMENT PRESENTS THE APPENDICES FOR THE FINAL RESEARCH REPORT FOR A PROJECT DESIGNED TO PRODUCE AN EXPERIMENTAL LEARNING PACKAGE IN ENERGY CONSERVATION FOR MEMBERS OF THE HOME BUILDING INDUSTRY. (SL)

GRANT NUMBER: OE-G00-75-02108/557-BH-70004

INSTITUTION NAME: HOUSTON UNIV., TEX. COLLEGE OF ARCHITECTURE.

SPONSORING AGENCY NAME: OFFICE OF EDUCATION (DHEW), WASHINGTON, D.C.

ACCESSION NUMBER: ED148611

CLEARINGHOUSE ACCESSION NUMBER: SE023491

PUBLICATION DATE: OCT 77

TITLE: PROCEEDINGS: NATIONAL SYMPOSIUM ON ENERGY CONSERVATION EDUCATION, WASHINGTON, D.C., OCTOBER 24-26, 1977.

PERSONAL AUTHOR: BANERJI, RANJIT K., ED.; SIMPSON, CAMILLE D., ED.

INSTITUTION CODE: BB815203

SPONSORING AGENCY CODE: RM066000

DESCRIPTOR: CONFERENCE REPORTS; *CONSERVATION (ENVIRONMENT); CONSERVATION EDUCATION; ECOLOGY; *ENERGY; *ENERGY CONSERVATION; *ENVIRONMENTAL EDUCATION; NATURAL RESOURCES; REPORTS; SCIENCE EDUCATION; *SYMPOSIA

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$14.05 PLUS POSTAGE.

DESCRIPTIVE NOTE: 274P.; CONTAINS OCCASIONAL MARGINAL LEGIBILITY IN DRAWINGS

ISSUE: RIEMAY78

ABSTRACT: THIS DOCUMENT REPORTS THE RESULTS OF A SYMPOSIUM HELD TO EXAMINE: (1) THE NEED FOR EDUCATIONAL PROGRAMS IN ENERGY CONSERVATION; (2) THE ISSUES AND PROCESSES INVOLVED IN THE DESIGN, IMPLEMENTATION, AND EVALUATION OF ENERGY CONSERVATION EDUCATIONAL PROGRAMS; (3) THE ROLE OF GOVERNMENT IN PROVIDING PROGRAMS IN ENERGY CONSERVATION; AND (4) THE PRESENT COOPERATIVE EFFORTS FOR MEETING ENERGY PROBLEMS. FOURTEEN PAPERS BY PARTICIPANTS ARE INCLUDED, EACH PRECEEDED BY A BRIEF ABSTRACT. PAPERS ADDRESS EVALUATION, CURRICULUM, GOVERNMENT ROLE, ATTITUDES, ENERGY, AND CONSERVATION AS THEY APPLY TO ENERGY CONSERVATION EDUCATION. (SL)

GRANT NUMBER: OE-G00-75-02108

INSTITUTION NAME: HOUSTON UNIV., TEX. COLLEGE OF ARCHITECTURE.

SPONSORING AGENCY NAME: OFFICE OF EDUCATION (DHEW), WASHINGTON, D.C.

ACCESSION NUMBER: ED149144

CLEARINGHOUSE ACCESSION NUMBER: CE014511

PUBLICATION DATE: DEC 77

TITLE: THE RESPONSE OF VOCATIONAL EDUCATION TO THE NATIONAL ENERGY CRISIS. A SPECIAL REPORT.

INSTITUTION CODE: BB803062

DESCRIPTOR: ADVISORY COMMITTEES; CURRICULUM DEVELOPMENT; *EDUCATIONAL NEEDS; EDUCATIONAL PRACTICE; *EDUCATIONAL RESPONSIBILITY; *ENERGY; *ENERGY CONSERVATION; FEDERAL GOVERNMENT; GOVERNMENT ROLE; INSERVICE EDUCATION; POST SECONDARY EDUCATION; PUBLIC POLICY; SECONDARY EDUCATION; TECHNICAL EDUCATION; TECHNOLOGICAL ADVANCEMENT; *TECHNOLOGY; *VOCATIONAL EDUCATION; ENERGY TECHNOLOGY

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$1.67 PLUS POSTAGE.

DESCRIPTIVE NOTE: 12P.

ISSUE: RIEJUN78

ABSTRACT: RATIONALE AND RECOMMENDATIONS ARE PRESENTED FOR VOCATIONAL EDUCATION'S RESPONSE TO THE NATIONAL ENERGY CRISIS IN LIGHT OF PRESENT INVOLVEMENT AND FUTURE NEEDS. THE PROBLEM IS STATED IN TERMS OF THE NEED FOR TRAINING PROGRAMS IN THE NEWER ENERGY TECHNOLOGIES, INCLUDING THOSE RELATED TO CONSERVATION. FEDERAL POLICIES ARE OUTLINED, SPECIFICALLY THE NATIONAL ENERGY GOALS FOR 1985. THESE ARE FOLLOWED BY A REVIEW OF THE STATUS OF ENERGY TECHNOLOGY DEVELOPMENT IN FOUR AREAS: SOLAR ENERGY, COAL MINING TECHNOLOGY, NUCLEAR ENERGY, AND OTHER ENERGY SOURCES. FOR EACH AREA IMPLICATIONS FOR VOCATIONAL EDUCATION ARE NOTED. A DISCUSSION OF PRESENT ENERGY-RELATED VOCATIONAL/TECHNICAL CURRICULUM DEVELOPMENT ACTIVITY AT BOTH THE POSTSECONDARY AND SECONDARY LEVEL INCLUDES RESULTS OF A NATIONAL SURVEY OF POSTSECONDARY INSTITUTIONS, PROGRAMS, AND ENROLLMENT IN EIGHT ENERGY-RELATED TECHNOLOGY FIELDS. IT IS CONCLUDED THAT THERE IS SOME AWARENESS OF THE PROBLEM AND GENERAL METHODS NECESSARY TO REDUCE IT BUT THAT THE RESPONSE OF THE VOCATIONAL EDUCATION SECTOR MUST BE ONE OF STRONG LEADERSHIP IN THE TOTAL EDUCATIONAL COMMUNITY. SIX SPECIFIC RECOMMENDATIONS IN THIS REGARD ARE ADDRESSED TO THE NEW DEPARTMENT OF ENERGY, TO STATE AND LOCAL ADVISORY COMMITTEES IN VOCATIONAL EDUCATION, AND TO THE NATIONAL INSTITUTE OF EDUCATION. FOCUS IN THE RECOMMENDATIONS IS ON INSERVICE TRAINING IN NEW ENERGY AND ENERGY CONSERVATION TECHNOLOGIES FOR VOCATIONAL EDUCATION PERSONNEL AND ON CURRICULUM DEVELOPMENT IN THESE AREAS. (JT)

INSTITUTION NAME: NATIONAL ADVISORY COUNCIL ON VOCATIONAL EDUCATION, WASHINGTON, D.C.

ACCESSION NUMBER: ED149450

CLEARINGHOUSE ACCESSION NUMBER: EA010267

PUBLICATION DATE: JAN 78

TITLE: COAL DEVELOPMENT IN THE NORTHERN GREAT PLAINS. THE IMPACT ON REVENUES OF STATE AND LOCAL GOVERNMENTS. AGRICULTURAL ECONOMIC REPORT NO. 394.

PERSONAL AUTHOR: STINSON, THOMAS F.; VOELKER, STANLEY W.

INSTITUTION CODE: BBB15288; NSD52725; HFB64650

SPONSORING AGENCY CODE: BBB06757

DESCRIPTOR: *CITY GOVERNMENT; COMPUTER SCIENCE; *ECONOMIC DEVELOPMENT; ELEMENTARY SECONDARY EDUCATION; *LOCAL GOVERNMENT; SCHOOL SYSTEMS; SIMULATION; *SOCIAL SERVICES; STATE GOVERNMENT; TABLES (DATA); TAXES; *TAX SUPPORT; COAL MINING; *ENERGYTAX SIMULATION MODEL; MONTANA; NORTH DAKOTA; SOUTH DAKOTA; WYOMING

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$3.50 PLUS POSTAGE.

DESCRIPTIVE NOTE: 72P.

ISSUE: RIEJUN78

ABSTRACT: DEVELOPMENT OF NORTHERN GREAT PLAINS COAL RESOURCES WILL CREATE NEW DEMANDS FOR STATE AND LOCAL GOVERNMENT SERVICES. DEVELOPMENT WILL ALSO PRODUCE INCREASED GOVERNMENT REVENUES. SPECIAL TAXES ON COAL PRODUCTION HAVE BEEN ENACTED IN MONTANA, NORTH DAKOTA, AND WYOMING IN ORDER TO ENSURE THAT STATE AND LOCAL GOVERNMENTS RECEIVE SUFFICIENT REVENUES TO FINANCE THE NEW SERVICES REQUIRED. THIS STUDY REPORTS DETAILED ESTIMATES OF THE STATE AND LOCAL TAXES THAT WOULD BE PAID BY THREE DIFFERENT-SIZED COAL MINES AND THEIR EMPLOYEES IN MONTANA, NORTH DAKOTA, SOUTH DAKOTA, AND WYOMING. THE ESTIMATES WERE OBTAINED BY USING THE ENERGYTAX SIMULATION MODEL. WHILE IN ALL STATES THE TOTAL REVENUE AVAILABLE APPEARS SUFFICIENT TO MEET THE INCREASED DEMANDS FOR SERVICES ATTRIBUTABLE TO THE MINES, THERE ARE OTHER CONSIDERATIONS. WHEN THE ANALYSIS IS DONE BY TYPE OF GOVERNMENT, STATE GOVERNMENTS AND, TO A LESSER EXTENT, COUNTY GOVERNMENTS APPEAR TO RECEIVE ENOUGH NEW REVENUES TO MEET THEIR NEEDS. THE CITIES AND, IN SOME STATES, THE SCHOOL DISTRICTS APPEAR LESS WELL-OFF. STATE AND LOCAL GOVERNMENTS MAY ALSO FACE A CASH FLOW PROBLEM WHEN MINERAL DEVELOPMENT OCCURS. (AUTHOR/IRT)

INSTITUTION NAME: ECONOMICS, STATISTICS, AND COOPERATIVES SERVICE (USDA), WASHINGTON, D.C.; MINNESOTA UNIV., MINNEAPOLIS.; NORTH DAKOTA STATE UNIV., FARGO.

SPONSORING AGENCY NAME: ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, D.C. OFFICE OF RESEARCH AND DEVELOPMENT.

ACCESSION NUMBER: ED149487

CLEARINGHOUSE ACCESSION NUMBER: EA010313

PUBLICATION DATE: 75

TITLE: MANUAL FOR PLANNING AND CONSTRUCTION OF SCHOOL BUILDINGS.

INSTITUTION CODE: PYE58500

DESCRIPTOR: ARCHITECTS; EDUCATIONAL ENVIRONMENT; *EDUCATIONAL SPECIFICATIONS; ELEMENTARY SECONDARY EDUCATION; ENERGY CONSERVATION; *FACILITY GUIDELINES; *FACILITY REQUIREMENTS; FINANCIAL SUPPORT; FIRE PROTECTION; LEGAL RESPONSIBILITY; SCHOOL COMMUNITY RELATIONSHIP; *SCHOOL CONSTRUCTION; SCHOOL DESIGN; *SCHOOL PLANNING; SITE SELECTION; STANDARDS; NEW HAMPSHIRE

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$6.01 PLUS POSTAGE.

DESCRIPTIVE NOTE: 105P.

ISSUE: RIEJUN78

ABSTRACT: THIS MANUAL HAS BEEN REVISED SINCE THE LAST GUIDE PUBLISHED IN 1971 TO KEEP FLEXIBILITY AS A FUNDAMENTAL OBJECTIVE. THE MANUAL CONTAINS SUGGESTIONS, RECOMMENDATIONS, AND MINIMUM REQUIREMENTS REGARDING SCHOOL FACILITY PLANNING. A NEW CHAPTER ENTITLED "ENERGY CONSERVATION THROUGH BETTER CONSTRUCTION" HAS BEEN ADDED TO THE MANUAL. (AUTHOR/MLF)

INSTITUTION NAME: NEW HAMPSHIRE STATE DEPT. OF EDUCATION, CONCORD.

ACCESSION NUMBER: ED149717

CLEARINGHOUSE ACCESSION NUMBER: IR005471

PUBLICATION DATE: SEP 77

TITLE: REPORT OF A PLANNING CONFERENCE FOR SOLAR TECHNOLOGY INFORMATION TRANSFER (NASHVILLE, TENNESSEE, SEPTEMBER 28-29, 1977).

PERSONAL AUTHOR: GLEAVES, EDWIN S., ED.

INSTITUTION CODE: BBB04472; BBB14261

DESCRIPTOR: COLLEGE LIBRARIES; CONFERENCE REPORTS; *INFORMATION DISSEMINATION; *INFORMATION NETWORKS; *LIBRARY PLANNING; PUBLIC LIBRARIES; *SOLAR RADIATION; SPECIAL LIBRARIES; *STATEWIDE PLANNING; TECHNOLOGY; *INFORMATION TRANSFER; *TENNESSEE

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$2.06 PLUS POSTAGE.

DESCRIPTIVE NOTE: 35P.

ISSUE: RIEJUN78

ABSTRACT: A SUMMARY OF THE DELIBERATIONS OF THE PLANNING CONFERENCE FOR SOLAR TECHNOLOGY INFORMATION TRANSFER--TO DISCUSS AND OUTLINE A FUNCTIONING SOLAR ENERGY TECHNOLOGY NETWORK IN THE STATE OF TENNESSEE--AND A SET OF RECOMMENDATIONS FOR FUTURE ACTION ARE PRESENTED IN THIS REPORT. TOPIC AREAS INCLUDE: (1) THE TENNESSEE REGIONAL LIBRARY SERVICE; (2) THE SYSTEM OF AREA RESOURCE CENTERS; (3) PUBLIC LIBRARIES; (4) SPECIAL AND ACADEMIC LIBRARIES; (5) PUBLIC INFORMATION PROGRAMS; AND (6) EDUCATIONAL PROGRAMS--ALL AS THEY RELATE TO SOLAR TECHNOLOGY INFORMATION TRANSFER. RECOMMENDATIONS ARE MADE FOR EACH OF THESE AREAS. A PROPOSAL FOR AN INFORMATION SYSTEM, CONFERENCE AGENDA AND PARTICIPANT LIST, LIBRARY BIBLIOGRAPHY, AND INFORMATIONAL ANNOUNCEMENTS ARE APPENDED. (KP)

INSTITUTION NAME: OAK RIDGE NATIONAL LAB., TENN.; SOUTHEASTERN LIBRARY ASSOCIATION, TUCKER, GA.

ACCESSION NUMBER: ED149797

CLEARINGHOUSE ACCESSION NUMBER: JC780051

PUBLICATION DATE: DEC 77

TITLE: SEMTAP: A NEW TECHNOLOGY TRANSFER NETWORK TO LINK BUSINESS AND INDUSTRY WITH FEDERAL RESEARCH AND DEVELOPMENT. INTERIM REPORT, OCTOBER 1976-NOVEMBER 1977.

PERSONAL AUTHOR: BROWN, WILLIAM M.; AND OTHERS

INSTITUTION CODE: BBB15314

SPONSORING AGENCY CODE: BBB00311

DESCRIPTOR: COMMUNITY COLLEGES; COMMUNITY DEVELOPMENT; CONSERVATION EDUCATION; CONSORTIA; DELIVERY SYSTEMS; *ENERGY CONSERVATION; ENVIRONMENTAL TECHNICIANS; FEDERAL STATE RELATIONSHIP; *INFORMATION DISSEMINATION; *JUNIOR COLLEGES; *RESEARCH UTILIZATION; *TECHNICAL ASSISTANCE; TECHNOLOGY; *SOUTHEASTERN MICHIGAN TECHNICAL ASSISTANCE PROGRAM

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$7.35 PLUS POSTAGE.

DESCRIPTIVE NOTE: 150P.; FIGURES 4-6, 9, 11, 13, AND TABLES 5-7 HAVE BEEN DELETED DUE TO SMALL SIZE OF TYPE

ISSUE: RIEJUN78

ABSTRACT: THE SOUTHEASTERN MICHIGAN TECHNICAL ASSISTANCE PROGRAM (SEMTAP) WAS ESTABLISHED IN 1977 BY TEN AREA COMMUNITY COLLEGES AND THE ENVIRONMENTAL RESEARCH INSTITUTE OF MICHIGAN (ERIM). IT PROVIDES A TECHNOLOGY DELIVERY SYSTEM OR NETWORK TO TRANSFER ENERGY CONSERVATION TECHNOLOGY TO SMALL BUSINESSES, HOMEOWNERS, AND LOCAL GOVERNMENTS, THUS FACILITATING THE TRANSFER OF FEDERAL RESEARCH AND DEVELOPMENT PROGRAM RESULTS TO ORGANIZATIONS AT THE LOCAL LEVEL. EACH SEMTAP COLLEGE HAS ESTABLISHED AN ENERGY CENTER WHICH ACTS AS AN "EXTENSION INSTITUTE" OR "RETAILER" TO PROVIDE LOCAL TRAINING ON A WIDE RANGE OF DOMESTIC PROBLEMS. CHAPTERS INCLUDE: (1) INTRODUCTION, EXAMINING THE ORIGINAL SEMTAP PROPOSAL AND A SUMMARY OF 1977 ACCOMPLISHMENTS; (2) DEVELOPMENT OF THE TECHNOLOGY TRANSFER NETWORK, DESCRIBING NETWORK ORGANIZATION AND COLLEGE STAFF ORIENTATION; (3) PUBLIC RELATIONS EFFORTS, DISCUSSING 1977 MEDIA, NEWSLETTER AND PROMOTIONAL EFFORTS; (4) TECHNOLOGY MARKETING ACTIVITIES, EXAMINING 1977 MARKET AND INDUSTRY NEEDS; (5) TECHNOLOGY TRANSFER ACTIVITIES, DISCUSSING 1977 EVALUATION, TRANSFER TRAINING, AND TECHNICAL ASSISTANCE ACTIVITIES; (6) CONCLUSIONS AND RECOMMENDATIONS; (7) PROPOSED PROGRAM FOR 1978; AND (8) SEMTAP PARTICIPATION IN THE MICHIGAN ENERGY EXTENSION SERVICE PROGRAM. SEMTAP NEWSLETTERS ARE APPENDED. (LH)

REPORT NUMBER: ERIM-126500-4-P

CONTRACT NUMBER: 99-06-09572

INSTITUTION NAME: ENVIRONMENTAL RESEARCH INST. OF MICHIGAN, ANN ARBOR.

SPONSORING AGENCY NAME: ECONOMIC DEVELOPMENT ADMINISTRATION (DOC), WASHINGTON, D.C.

ACCESSION NUMBER: ED149963

CLEARINGHOUSE ACCESSION NUMBER: SE022829

PUBLICATION DATE: MAR 77

TITLE: ENERGY: OPTIONS AND ISSUES.

PERSONAL AUTHOR: WALKER, HARRY O.

DESCRIPTOR: CONSERVATION EDUCATION; *ENERGY; *ENVIRONMENT; INSTRUCTIONAL MATERIALS; *NATURAL RESOURCES; *REFERENCE MATERIALS; SCIENCE EDUCATION; *SECONDARY EDUCATION; TECHNOLOGY

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$19.41 PLUS POSTAGE.

DESCRIPTIVE NOTE: 391P.; CONTAINS OCCASIONAL BROKEN TYPE; MARGINAL LEGIBILITY IN FIGURES

ISSUE: RIEJUN78

ABSTRACT: THIS BOOK IS INTENDED TO PROVIDE BASIC INFORMATION ABOUT ENERGY. THE FIRST THREE CHAPTERS DESCRIBE ENERGY SUPPLY AND DEMAND, USES AND SOURCES, AND COMMON ENERGY TERMS. THE NEXT TWO CHAPTERS EXPLAIN ENVIRONMENTAL AND BIOLOGICAL EFFECTS OF ENERGY SYSTEMS. TWELVE CHAPTERS THAT FOLLOW OUTLINE PAST HISTORY AND TECHNOLOGICAL KNOWLEDGE OF THE FOLLOWING ENERGY SOURCES: HYDROELECTRICITY, PETROLEUM, NATURAL GAS, COAL, NUCLEAR FISSION, FISSION REACTORS, GEOTHERMAL ENERGY, SOLAR, WIND POWER, ORGANIC WASTES, OCEANS, HYDROGEN AND FUEL CELLS, BREEDER REACTORS, AND FUSION REACTORS. THE FINAL CHAPTER OFFERS SUGGESTIONS FOR ENERGY CONSERVATION. A GLOSSARY OF ENERGY TERMS IS FOUND IN THE BACK OF THE BOOK. MANY TABLES, GRAPHS AND SIMPLE LINE DRAWINGS SUITABLE FOR CLASSROOM USE ARE INCLUDED. (AJ)

ACCESSION NUMBER: ED149979

CLEARINGHOUSE ACCESSION NUMBER: SE023448

PUBLICATION DATE: 77

TITLE: ENVIRONMENTAL EDUCATION, VALUES FOR THE FUTURE: CURRICULUM, POPULATION, ENVIRONMENTAL ETHICS, ENVIRONMENTAL DECISIONS, ECONOMICS, ECOSYSTEMS, ENERGY, AND TECHNOLOGY. PACKET K-2.

INSTITUTION CODE: JIM34744

SPONSORING AGENCY CODE: BBB00077

DESCRIPTOR: *CURRICULUM GUIDES; ELEMENTARY EDUCATION; *ENVIRONMENTAL EDUCATION; *INSTRUCTIONAL MATERIALS; *LEARNING ACTIVITIES; POPULATION EDUCATION; *PRIMARY EDUCATION; RESOURCE MATERIALS; SCIENCE EDUCATION; *TEACHING GUIDES; VALUES; ELEMENTARY SECONDARY EDUCATION ACT TITLE III

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$12.71 PLUS POSTAGE.

DESCRIPTIVE NOTE: 233P.; FOR RELATED DOCUMENTS, SEE SE 023 448-457 AND SE 023 459-465; CONTAINS OCCASIONAL LIGHT AND BROKEN TYPE

ISSUE: RIEJUN78

ABSTRACT: THIS BOOKLET IS ONE OF A SERIES IN ENVIRONMENTAL EDUCATION FOR STUDENTS IN GRADES K-12. SCIENTIFIC LITERACY, A MAJOR GOAL OF THE PROGRAM, IS DIVIDED INTO SEVEN CONCEPT AREAS: ECONOMICS, ECOSYSTEMS, ENERGY, TECHNOLOGY, POPULATION, ENVIRONMENTAL ETHICS, AND ENVIRONMENTAL DECISIONS. EACH OF THESE AREAS REPRESENTS A SEPARATE UNIT IN THE PROGRAM. AN INTRODUCTORY SECTION GIVES THE STRUCTURE, GOALS, AND GUIDELINES OF THIS PROGRAM. EACH OF THE SECTIONS IS COLOR-CODED FOR THE APPROPRIATE CONCEPT AREA. THESE SECTIONS CONTAIN BEHAVIORAL OBJECTIVES, APPROPRIATE SUBJECT AREAS, AND ACTIVITY OPTIONS. EACH OPTION GIVES A LISTING OF MATERIALS AND RESOURCES, PROCEDURES, AND DISCUSSION QUESTIONS. THERE ARE NUMEROUS ILLUSTRATIONS TO ASSIST THE TEACHER. THIS BOOKLET IS DESIGNED FOR GRADES K-2. (MA)

GRANT NUMBER: IOE-551-2-75

INSTITUTION NAME: ILLINOIS STATE OFFICE OF EDUCATION, SPRINGFIELD.

SPONSORING AGENCY NAME: BUREAU OF ELEMENTARY AND SECONDARY EDUCATION (DHEW/OE), WASHINGTON, D.C.

ACCESSION NUMBER: ED149980

CLEARINGHOUSE ACCESSION NUMBER: SE023449

PUBLICATION DATE: 77

TITLE: ENVIRONMENTAL EDUCATION, VALUES FOR THE FUTURE: CURRICULUM, POPULATION, ENVIRONMENTAL ETHICS, ENVIRONMENTAL DECISIONS, ECONOMICS, ECOSYSTEMS, ENERGY, AND TECHNOLOGY. PACKET 3-5.

INSTITUTION CODE: JIM34744

SPONSORING AGENCY CODE: BBB00077

DESCRIPTOR: *CURRICULUM GUIDES; *ELEMENTARY EDUCATION; *ENVIRONMENTAL EDUCATION; *INSTRUCTIONAL MATERIALS; *LEARNING ACTIVITIES; POPULATION EDUCATION; RESOURCE MATERIALS; SCIENCE EDUCATION; *TEACHING GUIDES; VALUES; ELEMENTARY SECONDARY EDUCATION ACT TITLE III

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$14.05 PLUS POSTAGE.

DESCRIPTIVE NOTE: 266P.; FOR RELATED DOCUMENTS, SEE SE 023 448-457 AND SE 023 459-465; PAGES 6, 7, AND 21 OF THE TECHNOLOGY SECTION REMOVED PRIOR TO BEING SHIPPED TO EDRS DUE TO COPYRIGHT RESTRICTIONS

ISSUE: RIEJUN78

ABSTRACT: THIS BOOKLET IS ONE OF A SERIES IN ENVIRONMENTAL EDUCATION FOR STUDENTS IN GRADES K-12. SCIENTIFIC LITERACY, A MAJOR GOAL OF THE PROGRAM, IS DIVIDED INTO SEVEN CONCEPT AREAS: ECONOMICS, ECOSYSTEMS, ENERGY, TECHNOLOGY, POPULATION, ENVIRONMENTAL ETHICS, AND ENVIRONMENTAL DECISIONS. EACH OF THESE AREAS REPRESENTS A SEPARATE UNIT IN THE PROGRAM. AN INTRODUCTORY SECTION GIVES THE STRUCTURE, GOALS, AND GUIDELINES OF THIS CURRICULUM PROGRAM. EACH OF THE SECTIONS IS COLOR-CODED FOR THE APPROPRIATE CONCEPT AREA. THESE SECTIONS CONTAIN BEHAVIORAL OBJECTIVES, APPROPRIATE SUBJECT AREAS, AND ACTIVITY OPTIONS. EACH OPTION GIVES A LISTING OF MATERIALS AND RESOURCES, PROCEDURES, AND DISCUSSION QUESTIONS. THERE ARE ILLUSTRATIONS TO ASSIST THE TEACHER. THIS PARTICULAR BOOKLET IS DESIGNED FOR GRADES 3-5. (MA)

GRANT NUMBER: IOE-551-2-75

INSTITUTION NAME: ILLINOIS STATE OFFICE OF EDUCATION, SPRINGFIELD.

SPONSORING AGENCY NAME: BUREAU OF ELEMENTARY AND SECONDARY EDUCATION (DHEW/OE), WASHINGTON, D.C.

ACCESSION NUMBER: ED149987

CLEARINGHOUSE ACCESSION NUMBER: SE023456

PUBLICATION DATE: 77

TITLE: ENVIRONMENTAL EDUCATION, VALUES FOR THE FUTURE: ENERGY, GRADES 6-8.

INSTITUTION CODE: JIM34744

SPONSORING AGENCY CODE: BBB00077

DESCRIPTOR: *ELEMENTARY SECONDARY EDUCATION; *ENERGY; *ENVIRONMENTAL EDUCATION; *INSTRUCTIONAL MATERIALS; INTERDISCIPLINARY APPROACH; *LEARNING ACTIVITIES; MIDDLE SCHOOLS; NATURAL RESOURCES; RESOURCE MATERIALS; SCIENCE EDUCATION; *TEACHING GUIDES; ELEMENTARY SECONDARY EDUCATION ACT TITLE III

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$2.06 PLUS POSTAGE.

DESCRIPTIVE NOTE: 47P.; FOR RELATED DOCUMENTS, SEE SE 023 448-457 AND SE 023 459-465; CONTAINS OCCASIONAL LIGHT AND BROKEN TYPE

ISSUE: RIEJUN78

ABSTRACT: THIS BOOKLET ON ENERGY IS ONE OF A SERIES IN ENVIRONMENTAL EDUCATION FOR GRADES K-12. THE ACTIVITIES CONTAINED WITHIN ADDRESS THE EFFECT OF CULTURE IN DETERMINING ENERGY NEEDS, ENERGY LOSS, AND FORMS OF ENERGY. FOUR BASIC CONCEPTS ARE LISTED, ALONG WITH BEHAVIORAL OBJECTIVES, SUBJECT AREAS, KEY WORDS, AND DEFINITIONS FOR EACH. THE THREE ACTIVITY OPTIONS ASSOCIATED WITH EACH CONCEPT INCLUDE THE FOLLOWING INFORMATION: MATERIALS AND RESOURCES; PROCEDURES; DISCUSSION QUESTIONS; FURTHER ACTIVITIES; AND SAMPLE WORKSHEETS. THESE INTERDISCIPLINARY ACTIVITIES ARE DESIGNED FOR STUDENTS IN GRADES 6-8. (MA)

GRANT NUMBER: IOE-551-2-75

INSTITUTION NAME: ILLINOIS STATE OFFICE OF EDUCATION, SPRINGFIELD.

SPONSORING AGENCY NAME: BUREAU OF ELEMENTARY AND SECONDARY EDUCATION (DHEW/OE), WASHINGTON, D.C.

ACCESSION NUMBER: ED149994

CLEARINGHOUSE ACCESSION NUMBER: SE023464

PUBLICATION DATE: 77

TITLE: ENVIRONMENTAL EDUCATION, VALUES FOR THE FUTURE: ENERGY, GRADES 9-12.

INSTITUTION CODE: JIM34744

SPONSORING AGENCY CODE: BBB00077

DESCRIPTOR: ENERGY; *ENERGY CONSERVATION; *ENVIRONMENTAL EDUCATION; *INSTRUCTIONAL MATERIALS; INTERDISCIPLINARY APPROACH; *LEARNING ACTIVITIES; NATURAL RESOURCES; SCIENCE EDUCATION; *SECONDARY EDUCATION; *TEACHING GUIDES; ELEMENTARY SECONDARY EDUCATION ACT TITLE III

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$3.50 PLUS POSTAGE.

DESCRIPTIVE NOTE: 58P.; FOR RELATED DOCUMENTS, SEE SE 023 448-457 AND SE 023 459-465; CONTAINS OCCASIONAL LIGHT AND BROKEN TYPE

ISSUE: RIEJUN78

ABSTRACT: THIS BOOKLET ON ENERGY IS ONE IN A SERIES ON ENVIRONMENTAL EDUCATION FOR GRADES K-12. THE ACTIVITIES EXPLORE ENERGY USE AND TECHNOLOGY, ALONG WITH THEIR ENVIRONMENTAL IMPACT. FIVE BASIC BEHAVIORAL OBJECTIVES ARE LISTED WITH ACTIVITY OPTIONS AND APPROPRIATE SUBJECT AREAS. THREE ACTIVITIES ARE GIVEN FOR EACH OBJECTIVE. INFORMATION FOR THESE INCLUDES MATERIALS AND RESOURCES, PROCEDURES, AND DISCUSSION QUESTIONS. THE ACTIVITIES ARE INTERDISCIPLINARY AND ARE DESIGNED FOR HIGH SCHOOL STUDENTS, GRADES 9-12. THEY INCLUDE ROLE PLAYING, GAMES AND SIMULATIONS, PHYSICS EXPERIMENTS, AND MATHEMATICAL CALCULATIONS. ILLUSTRATIONS, DATA SHEETS, WORKSHEETS, AND TABLES ARE ALSO GIVEN. (MA)

GRANT NUMBER: IOE-551-2-75

INSTITUTION NAME: ILLINOIS STATE OFFICE OF EDUCATION, SPRINGFIELD.

SPONSORING AGENCY NAME: BUREAU OF ELEMENTARY AND SECONDARY EDUCATION (DHEW/OE), WASHINGTON, D.C.

ACCESSION NUMBER: ED150046

CLEARINGHOUSE ACCESSION NUMBER: SO010610

PUBLICATION DATE: DEC 77

TITLE: ENERGY FOR DEVELOPMENT: THIRD WORLD OPTIONS. WORLDWATCH PAPER 15.

PERSONAL AUTHOR: HAYES, DENIS

INSTITUTION CODE: BBB13108

SPONSORING AGENCY CODE: BBB14927

DESCRIPTOR: CITY PROBLEMS; CLIMATIC FACTORS; DEPLETED RESOURCES; *DEVELOPING NATIONS; *ECONOMIC DEVELOPMENT; ECONOMIC DISADVANTAGEMENT; EMPLOYMENT; *ENERGY; ENERGY CONSERVATION; EVALUATION; FUELS; *FUTURES (OF SOCIETY); *GLOBAL APPROACH; HUMAN GEOGRAPHY; JOB DEVELOPMENT; LIVING STANDARDS; NATURAL RESOURCES; RURAL TO URBAN MIGRATION; *SOLAR RADIATION; WORLD AFFAIRS; WORLD PROBLEMS

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 45P.; FUNDS WERE ALSO PROVIDED BY AL DIN'IYYAH INST.

ISSUE: RIEJUN78

ABSTRACT: FOCUSING ON THE NEED FOR ENERGY TO SUSTAIN ECONOMIC DEVELOPMENT ON A LONG-TERM BASIS, THE DOCUMENT EXAMINES ENERGY OPTIONS OF THE POST-PETROLEUM ERA IN DEVELOPING NATIONS. NUCLEAR POWER AND SOLAR POWER ARE THE MOST IMPORTANT AMONG PROPOSED ALTERNATIVE ENERGY SOURCES. LIMITED APPLICABILITY OF NUCLEAR TECHNOLOGY TO THE THIRD WORLD IS DISCUSSED. PROBLEMS INCLUDE THE NEED OF MOST DEVELOPING NATIONS TO SEEK FOREIGN FUEL TO POWER NUCLEAR PLANTS, THE DIFFICULTY OF DESIGNING NUCLEAR FACILITIES THAT WORK EQUALLY WELL IN DIFFERENT ENVIRONMENTS, AND THE PROBLEM OF DECOMMISSIONING RADIOACTIVE FACILITIES AT THE END OF THEIR USEFULNESS. ENERGY-RELATED RESEARCH AND EXPERIMENTS INDICATE THAT THE MOST LIKELY SOURCES FOR NEW ENERGY ARE SOLAR (SUNLIGHT), WIND, HYDROPOWER, AND BIOMASS). FACTORS WHICH SHOULD ENCOURAGE THE THIRD WORLD TO HARNESS SOLAR ENERGY SOURCES INCLUDE: A GENERAL ABUNDANCE OF SUNLIGHT, A DISPERSED AND PREDOMINATELY RURAL POPULATION (WHICH ENCOURAGES DECENTRALIZED ENERGY RESOURCES), PROHIBITIVE COST OF CONVENTIONAL ENERGY, CUSTOMARY DEPENDENCE ON INDIRECT SOLAR SOURCES SUCH AS FIREWOOD, AND INSIGNIFICANT CAPITAL INVESTMENT IN PETROLEUM-POWERED ENERGY. VARIOUS OBJECTIONS AND RESERVATIONS CONCERNED WITH THE TRANSITION TO SOLAR ENERGY ARE EVALUATED. THE CONCLUSION IS THAT SOLAR ENERGY, THE MOST VIABLE ENERGY SOURCE IN THE POST-PETROLEUM AGE, CAN CONTRIBUTE POSITIVELY TO ECONOMIC DEVELOPMENT IN BOTH DEVELOPING AND INDUSTRIALIZED NATIONS. (AUTHOR/DB)

AVAILABILITY: WORLDWATCH INSTITUTE, 1776 MASSACHUSETTS AVENUE, N.W., WASHINGTON, D.C. 20036 ($2.00, PAPER COVER, QUANTITY DISCOUNTS AVAILABLE)

INSTITUTION NAME: WORLDWATCH INST., WASHINGTON, D.C.

SPONSORING AGENCY NAME: UNITED NATIONS ENVIRONMENT PROGRAM, NEW YORK, N.Y.

ACCESSION NUMBER: ED150078

CLEARINGHOUSE ACCESSION NUMBER: SO010681

PUBLICATION DATE: FEB 78

TITLE: LOCAL RESPONSES TO GLOBAL PROBLEMS: A KEY TO MEETING BASIC HUMAN NEEDS. WORLDWATCH PAPER 17.

PERSONAL AUTHOR: STOKES, BRUCE

INSTITUTION CODE: BBB13108

DESCRIPTOR: *ACTION PROGRAMS (COMMUNITY); *CITIZEN PARTICIPATION; COOPERATION; DEVELOPED NATIONS; DEVELOPING NATIONS; ECONOMIC FACTORS; FINANCIAL NEEDS; FINANCIAL SUPPORT; *GLOBAL APPROACH; HOUSING PATTERNS; *HUMAN LIVING; INTERNATIONAL ORGANIZATIONS; MEDICAL SERVICES; NEEDS; PROBLEM SOLVING; *PRODUCTIVE THINKING; QUALITY OF LIFE; RESOURCE ALLOCATIONS; SOCIAL ACTION; SOCIAL FACTORS; SOCIAL RESPONSIBILITY; SOCIOCULTURAL PATTERNS; SOCIOECONOMIC INFLUENCES; SUCCESS FACTORS; WORLD AFFAIRS; *WORLD PROBLEMS

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 62P.

ISSUE: RIEJUN78

ABSTRACT: THE BOOKLET MAINTAINS THAT THE KEY TO MEETING BASIC HUMAN NEEDS IS THE PARTICIPATION OF INDIVIDUALS AND COMMUNITIES IN LOCAL PROBLEM SOLVING. SOME OF THE MOST IMPORTANT ACHIEVEMENTS IN PROVIDING FOOD, UPGRADING HOUSING, IMPROVING HUMAN HEALTH, AND TAPPING NEW ENERGY SOURCES, COMES THROUGH LOCAL SELF-HELP PROJECTS. PROPONENTS OF LOCAL EFFORTS AT WORLD PROBLEM SOLVING POINT OUT THAT NATIONAL AND INTERNATIONAL EFFORTS ARE TOO HIGHLY CENTRALIZED TO ENCOURAGE DIRECT ACTION BY THOSE WHO ARE MOST AFFECTED. EXAMPLES OF PROBLEM-SOLVING ACHIEVEMENTS BY LOCAL INITIATIVE INCLUDE PRIVATE-PLOT AGRICULTURE IN SOCIALIST COUNTRIES; PREFABRICATED HOUSING IN INDUSTRIAL NATIONS; SOLAR HEATING IN CHINESE VILLAGES; AND SELF HEALTH CARE IN INDUSTRIAL AND THIRD WORLD NATIONS. COOPERATION OF NATIONAL AND INTERNATIONAL AGENCIES WITH COMMUNITY ORGANIZATIONS CAN BE EFFECTIVE IF THEY COMBINE LOCAL INITIATIVE WITH LONG-TERM FINANCING FOR SPECIFIC PROJECTS. EXAMPLES OF SUCCESSFUL COOPERATION INCLUDE THE WORLD BANK URBANIZATION PROJECT (WHICH PROVIDED $660 MILLION TO 15 DEVELOPING NATIONS BETWEEN 1972-77 FOR HOUSING), AND THE LOCAL DEVELOPMENT PROJECT OF THE INTER-AMERICAN FOUNDATION (WHICH DISTRIBUTED $40 MILLION BETWEEN 1971-76 TO LATIN AMERICAN CITIZENS GROUPS FOR AGRICULTURAL AND HOUSING IMPROVEMENTS). THE CONCLUSION IS THAT LOCAL PARTICIPATION IN SOCIAL REFORM OFFERS INDIVIDUALS THE OPPORTUNITY TO UNDERSTAND AND DEVELOP ADMINISTRATIVE AND ORGANIZATIONAL SKILLS TO DEAL WITH BOTH IMMEDIATE AND LONG-TERM NEEDS. (AUTHOR/DB)

AVAILABILITY: WORLDWATCH INSTITUTE, 1776 MASSACHUSETTS AVENUE, N.W., WASHINGTON, D.C. 20036 ($2.00, PAPER COVER)

INSTITUTION NAME: WORLDWATCH INST., WASHINGTON, D.C.

ACCESSION NUMBER: ED150273

CLEARINGHOUSE ACCESSION NUMBER: CE012374

PUBLICATION DATE: 76

TITLE: CAREER EDUCATION IN APPALACHIAN MARYLAND. INVESTIGATION AND DECISION MAKING: SCIENCE.

INSTITUTION CODE: BBB15394

DESCRIPTOR: *CAREER EDUCATION; CAREER EXPLORATION; CURRICULUM GUIDES; EDUCATIONAL OBJECTIVES; INTERMEDIATE GRADES; JUNIOR HIGH SCHOOLS; *LEARNING ACTIVITIES; MIDDLE SCHOOLS; *SCIENCE CURRICULUM; MARYLAND

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 92P.; FOR RELATED DOCUMENTS SEE CE 011 879-880 AND CE 012 376-376. SEVERAL PAGES OF DIAGRAMS WILL NOT REPRODUCE WELL DUE TO FAINT TYPE. PAGE 54 OF THE ORIGINAL DOCUMENT WAS REMOVED DUE TO COPYRIGHTED MATERIAL

ISSUE: RIEJUL78

ABSTRACT: THE SCIENCE CURRICULUM ACTIVITIES PRESENTED IN THIS GUIDE WERE DEVELOPED AS ONE COMPONENT OF A TOTAL CAREER EDUCATION DEMONSTRATION PROJECT FOR APPALACHIAN MARYLAND, AND ARE INTENDED FOR USE AS SUPPLEMENTS TO THE TOTAL MIDDLE OR JUNIOR HIGH SCHOOL CURRICULUM. INTRODUCTORY MATERIAL LISTS CAREER EDUCATION CONCEPTS AND OUTLINES CAREER AND OCCUPATIONAL DEVELOPMENT OBJECTIVES. THE BODY OF THE GUIDE CONSISTS OF THE FOLLOWING SIXTEEN SCIENCE UNITS: ASTRONOMY, CHEMISTRY, COMMUNICATIONS, ECOLOGY, ENERGY (ELECTRICITY), ENERGY (HEAT), ENERGY (NUCLEAR), ENERGY (SOUND), FLUID PRESSURE, GEOLOGY, LIVING THINGS (GENERAL), LIVING THINGS (PLANT LIFE), LIVING THINGS (ANIMAL LIFE), LIVING THINGS (STRUCTURES AND FUNCTIONS OF MAN), SIMPLE MACHINES, AND WEATHER. EACH UNIT RELATES CAREER EDUCATION ACTIVITIES TO ONE OR MORE CONCEPTS WITHIN THE SPECIFIC UNIT AREA. CAREER EDUCATION ACTIVITIES ARE IDENTIFIED ACCORDING TO TYPE OF ACTIVITY (E.G., RESEARCH, FIELD TRIP, PUZZLE, ROLE PLAY, EXPERIMENT, REPORT). MATERIALS REQUIRED FOR MANY OF THE ACTIVITIES ARE APPENDED. (SH)

INSTITUTION NAME: TRI-COUNTY CAREER EDUCATION TASK FORCE, OAKLAND, MD.

ACCESSION NUMBER: ED150699

CLEARINGHOUSE ACCESSION NUMBER: EA010330

PUBLICATION DATE: 11 APR 78

TITLE: FACILITIES RECYCLING FOR ENERGY CONSERVATION.

PERSONAL AUTHOR: FREDRICKSON, JOHN H.

DESCRIPTOR: ADMINISTRATOR RESPONSIBILITY; ARCHITECTS; ARCHITECTURAL PROGRAMING; *EDUCATIONAL FACILITIES; EDUCATIONAL PLANNING; EDUCATIONAL SPECIFICATIONS; ELEMENTARY SECONDARY EDUCATION; *ENERGY CONSERVATION; FACILITY INVENTORY; HIGHER EDUCATION; ILLUMINATION LEVELS; MECHANICAL EQUIPMENT; NEEDS ASSESSMENT; PRINCIPALS; *RECYCLING; *SCHOOL IMPROVEMENT; SCHOOL SCHEDULES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$1.67 PLUS POSTAGE.

DESCRIPTIVE NOTE: 10P.; PAPER PRESENTED AT THE ANNUAL MEETING OF THE NORTH CENTRAL ASSOCIATION OF COLLEGES AND SCHOOLS (83RD, CHICAGO, ILLINOIS, APRIL 1978)

ISSUE: RIEJUL78

ABSTRACT: CONSERVATION OF ENERGY IS WITHIN THE CONTROL AND VERY MUCH WITHIN THE RESPONSIBILITY OF EDUCATORS. SCHOOLS ARE AMONG THE GREATEST "WASTERS" OF ENERGY IN THE NATION TODAY. PRINCIPALS MUST BECOME MORE KNOWLEDGEABLE ABOUT THEIR BUILDINGS THAN THEY HAVE BEEN IN THE PAST. INDEPTH INSPECTIONS OF THE SCHOOL FACILITIES WILL IDENTIFY THE MOST FLAGRANT ENERGY-WASTING CONDITIONS. CORRECTIVE MEASURES SHOULD BE INSTITUTED IMMEDIATELY. ENERGY-WASTING PRACTICES MUST ALSO BE INVESTIGATED WITH FREQUENT PERSONAL AND PUBLISHED REMINDERS ADVISABLE FOR STAFF AND STUDENTS. CONSIDERATION MAY HAVE TO BE GIVEN EVENTUALLY TO RESCHEDULING THE ENTIRE SCHOOL YEAR. SIGNIFICANT QUANTITIES OF ENERGY CAN BE CONSERVED BY CLOSING SCHOOLS EARLIER IN SPRING. A CASE CAN BE MADE TO RENOVATE A BUILDING FOR ENERGY CONSERVATION PURPOSES IN CONJUNCTION WITH A WELL-ESTABLISHED NEED FOR FACILITY IMPROVEMENT TO MEET CHANGING EDUCATIONAL REQUIREMENTS. TO ACCOMPLISH THIS, EDUCATIONAL PRIORITIES MUST BE ASSESSED, AVAILABLE PHYSICAL RESOURCES EVALUATED, AND MAJOR DECISIONS MADE FOLLOWED BY APPROPRIATE ACTION. (AUTHOR/MLF)

ACCESSION NUMBER: ED150755

CLEARINGHOUSE ACCESSION NUMBER: EA010415

PUBLICATION DATE: 75

TITLE: ENERGY CONSERVATION IN THE SCHOOL CURRICULUM. ENERGY CONSERVATION MATERIALS PACKAGE 3.

INSTITUTION CODE: MGG47325

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; *CONSERVATION (ENVIRONMENT); *CONSERVATION EDUCATION; *CURRICULUM DEVELOPMENT; ELEMENTARY SECONDARY EDUCATION; *ENERGY CONSERVATION; ENVIRONMENTAL INFLUENCES; FUEL CONSUMPTION; INSTRUCTIONAL MATERIALS; LIFE STYLE; QUALITY OF LIFE; SOCIAL PROBLEMS; STATE DEPARTMENTS OF EDUCATION; VALUES; *INTERSTATE ENERGY CONSERVATION LEADERSHIP PROJECT

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS

DESCRIPTIVE NOTE: 25P.; FOR RELATED DOCUMENTS, SEE ED 122 361-364 AND EA 010 416

ISSUE: RIEJUL78

ABSTRACT: THIS PAMPHLET IS COMPOSED OF TWO SECTIONS. THE FIRST IS AN ADDRESS BY S. DAVID FREEMAN DELIVERED TO THE BOSTON CONFERENCE OF THE INTERSTATE ENERGY CONSERVATION LEADERSHIP PROJECT (IECL). FREEMAN CLAIMS THAT THE ENERGY CRISIS CAN BE THE MOST EFFECTIVE TEACHING AID OF THE DECADE, AND THAT THE ENERGY CRISIS REFLECTS A SET OF PROBLEMS THAT REQUIRE CHANGES IN ATTITUDES, VALUES, LIFESTYLES, AND METHODS OF CONSTRUCTION THAT WILL REQUIRE MANY YEARS TO ACHIEVE. THE SECOND SECTION IS A DESCRIPTIVE BIBLIOGRAPHY OF ENERGY-RELATED ENVIRONMENTAL EDUCATION AND ENERGY CONSERVATION INSTRUCTIONAL MATERIALS PRODUCED BY STATE EDUCATION AGENCIES. MANY OF THE ITEMS ARE A PART OF THE IECL CLEARINGHOUSE, WHILE OTHERS WERE EXCERPTED FROM OTHER BIBLIOGRAPHIES. OTHER MATERIALS OF INTEREST TO THE ENVIRONMENTAL EDUCATOR AND THOSE INTERESTED IN ENERGY CONSERVATION ARE ALSO INCLUDED. (AUTHOR/MLF)

INSTITUTION NAME: MASSACHUSETTS STATE DEPT. OF EDUCATION.

BOSTON.

ACCESSION NUMBER: ED150756

CLEARINGHOUSE ACCESSION NUMBER: EA010416

PUBLICATION DATE: 75

TITLE: ENERGY CONSERVATION IN SCHOOL TRANSPORTATION SYSTEMS. ENERGY CONSERVATION MATERIALS PACKAGE 4.

INSTITUTION CODE: MSG47325

DESCRIPTOR: CHECK LISTS; DRIVER EDUCATION; ELEMENTARY SECONDARY EDUCATION; *ENERGY CONSERVATION; EQUIPMENT MAINTENANCE; *FUEL CONSUMPTION; *GUIDELINES; SCHEDULING; SCHOOL BUSES; *STUDENT TRANSPORTATION

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 16P.; FOR RELATED DOCUMENTS, SEE ED 122 363-364 AND EA 010 415

ISSUE: RIEJUL78

ABSTRACT: SINCE THE ENERGY SHORTAGE OCCURRED, PUPIL TRANSPORTATION HAS EMPLOYED MAJOR CONSERVATION MEASURES THAT HAVE REDUCED THE AMOUNT OF FUEL REQUIRED TO TRANSPORT CHILDREN TO AND FROM SCHOOL AND SCHOOL AUTHORIZED ACTIVITIES. SOME BASIC GUIDELINES FOR SOUND FUEL REDUCTIONS IN SCHOOL TRANSPORTATION ARE SUPPLIED IN THIS PAMPHLET. FROM THESE GUIDELINES, A COMPREHENSIVE CHECKLIST CAN BE DEVELOPED FOR USE BY INDIVIDUAL SCHOOL DISTRICTS. (AUTHOR/MLF)

INSTITUTION NAME: MASSACHUSETTS STATE DEPT. OF EDUCATION, BOSTON.

ACCESSION NUMBER: ED151142

CLEARINGHOUSE ACCESSION NUMBER: SE022859

PUBLICATION DATE: JUN 77

TITLE: REVIEWS OF DATA ON SCIENCE RESOURCES, NO. 29. CURRENT AND FUTURE UTILIZATION OF SCIENTIFIC AND TECHNICAL PERSONNEL IN ENERGY-RELATED ACTIVITIES.

INSTITUTION CODE: BBB08446

DESCRIPTOR: *CAREER EDUCATION; *ENERGY; *ENGINEERS; MANPOWER DEVELOPMENT; *MANPOWER NEEDS; PERSONNEL; PROFESSIONAL PERSONNEL; SCIENCE EDUCATION; SCIENTIFIC MANPOWER; *SCIENTISTS; NATIONAL SCIENCE FOUNDATION

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 8P.; NOT AVAILABLE IN HARD COPY DUE TO MARGINAL LEGIBILITY OF ORIGINAL DOCUMENT

ISSUE: RIEJUL78

ABSTRACT: THIS NATIONAL SCIENCE FOUNDATION (NSF) BULLETIN SUMMARIZES THE NSF PROGRAM OF ENERGY MANPOWER STUDIES THAT ASSESSED THE IMPACT OF PAST ENERGY DEVELOPMENTS AND FUTURE OPTIONS FOR SCIENTIFIC AND TECHNICAL MANPOWER. THIS DOCUMENT SUMMARIZES THE UTILIZATION OF SCIENTIFIC PERSONNEL IN ENERGY-RELATED ACTIVITIES IN PRIVATE INDUSTRY IN 1975 AND SHORTAGES OF TECHNICAL PERSONNEL FOR ENERGY-RELATED ACTIVITIES IN PRIVATE INDUSTRY. ALSO, PROJECTED NEEDS FOR SCIENCE AND ENGINEERING PERSONNEL IN ENERGY-RELATED ACTIVITIES ARE SUMMARIZED. GRAPHS AND CHARTS ARE USED TO ILLUSTRATE THE DISCUSSIONS. HIGHLIGHTS OF THE REPORT INCLUDE: (1) NUMBERS OF BACCALAUREATE DEGREES IN MINING, CHEMICAL, AND PETROLEUM ENGINEERING HAVE INCREASED IN RESPONSE TO JOB MARKET DEMAND; (2) PROJECTED REQUIREMENTS FOR SCIENTISTS AND ENGINEERS FOR 1985 IN ENERGY PRODUCTION ARE APPROXIMATELY 220,000; AND (3) THE ENERGY PRODUCTION SECTOR WILL NOT, ACCORDING TO PROJECTIONS, MAKE GREATER PROPORTIONATE DEMANDS ON THE SUPPLY OF MANPOWER AS TIME PASSES. (AR)

REPORT NUMBER: NSF-77-315

AVAILABILITY: SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON, D.C. 20402 (STOCK NUMBER 038-000-00328-3; NO PRICE QUOTED)

INSTITUTION NAME: NATIONAL SCIENCE FOUNDATION, WASHINGTON, D.C. DIV. OF SCIENCE RESOURCES STUDIES.

ACCESSION NUMBER: ED151242

CLEARINGHOUSE ACCESSION NUMBER: SO010497

PUBLICATION DATE: SEP 77

TITLE: ENERGY AND SOCIOLOGY.

PERSONAL AUTHOR: COTTRELL, FRED

DESCRIPTOR: CONCEPT FORMATION; CONFLICT RESOLUTION; ECONOMIC FACTORS; ECONOMICS; *ENERGY; *FUTURES (OF SOCIETY); INTELLECTUAL DISCIPLINES; KNOWLEDGE LEVEL; LIFE STYLE; POLLUTION; POPULATION GROWTH; RELATIONSHIPS; RESEARCH NEEDS; SCIENTIFIC RESEARCH; *SOCIAL PROBLEMS; *SOCIAL SCIENCE RESEARCH; SOCIAL VALUES; *SOCIOLOGY; VALUES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$1.67 PLUS POSTAGE.

DESCRIPTIVE NOTE: 21P.; PAPER PRESENTED AT ANNUAL MEETING OF THE AMERICAN SOCIOLOGICAL ASSOCIATION (CHICAGO, ILLINOIS, SEPTEMBER 5-9, 1977)

ISSUE: RIEJUL78

ABSTRACT: THE REALIZATION THAT ALL SCIENTIFIC PHENOMENA ARE MANIFESTATIONS OF ENERGY, RATHER THAN SEPARATE SUBJECTS OF INQUIRY FOR CHEMISTS, PHYSICISTS, OR BIOLOGISTS, HAS ENCOURAGED SCIENTISTS TO EXPLORE GAPS BETWEEN THE TRADITIONAL FIELDS OF SCIENTIFIC INQUIRY. IN LIGHT OF THIS FACT, IT WOULD SEEM THAT THE FLOW OF ENERGY SHOULD BE A MAJOR AREA OF CONCERN TO SOCIAL SCIENTISTS, PARTICULARLY SOCIOLOGISTS. HOWEVER, THERE IS LITTLE EVIDENCE THAT SOCIOLOGISTS ARE INTERESTED IN INFLUENCES WHICH ENERGY HAS HAD UPON SOCIETY. ASPECTS OF THIS INFLUENCE WHICH SOCIOLOGISTS MIGHT EXPLORE CAN BE FOUND BY LOOKING AT THE HISTORY OF WESTERN CIVILIZATION: EXPANSION OF TRADE AND COLONIALIZATION MADE POSSIBLE BY HIGH-ENERGY MECHANISMS SUCH AS THE SAILING SHIP; TECHNOLOGICAL ADVANCES ON LIFE STYLE; AND PASSAGE OF POLITICAL POWER FROM LANDOWNERS TO TRADERS AND INDUSTRIALISTS. NOW THAT SCIENTISTS AND SOCIAL SCIENTISTS ARE QUESTIONING THE SURVIVAL OF TODAY'S HIGH ENERGY SOCIETY, SOCIOLOGISTS ARE FACED WITH NEW CONCERNS AND ARE RESPONSIBLE FOR PROVIDING PROPOSITIONS ABOUT A WORLD IN WHICH SURPLUS ENERGY IS IN CONTINUOUS DECLINE. POSSIBLE TOPICS FOR RESEARCH BY SOCIOLOGISTS INCLUDE ENERGY CONSERVATION, THE RELATIONSHIP OF HUMAN VALUES TO MATERIAL CONCERNS, POPULATION TRENDS, THE POLLUTANT EFFECTS OF HIGH ENERGY, AND PROLIFERATION OF COMPETING DEMANDS FOR ENERGY. THE CONCLUSION IS THAT SOCIOLOGICAL RESEARCH WILL CONTRIBUTE THE MOST TO KNOWLEDGE BY INVESTIGATING INTERACTIONS BETWEEN MATERIAL AND TECHNOLOGICAL REALITIES, SUCH AS THE DECLINING ENERGY SUPPLY, AND HUMAN VALUES AND ATTITUDES. (AUTHOR/DB)

ACCESSION NUMBER: ED151297

CLEARINGHOUSE ACCESSION NUMBER: SO010782

PUBLICATION DATE: APR 77

TITLE: ENERGY ACTIVITIES FOR JUNIOR HIGH SOCIAL STUDIES.

INSTITUTION CODE: BBB15410

DESCRIPTOR: ACTIVITY LEARNING; *ACTIVITY UNITS; COMMUNITY ATTITUDES; CONSUMER EDUCATION; CULTURAL DIFFERENCES; DECISION MAKING SKILLS; EDUCATIONAL GAMES; *ENERGY; *ENERGY CONSERVATION; ENVIRONMENTAL EDUCATION; FUTURES (OF SOCIETY); GRADE 7; GRADE 8; GROUP ACTIVITIES; INFORMATION UTILIZATION; *INSTRUCTIONAL MATERIALS; INTERDISCIPLINARY APPROACH; JUNIOR HIGH SCHOOL STUDENTS; LIFE STYLE; PERSONAL VALUES; PROBLEM SOLVING; SCIENCE ACTIVITIES; SCIENCE INSTRUCTION; SCIENCE UNITS; SIMULATION; SOCIAL PROBLEMS; SOCIAL STUDIES; *SOCIAL STUDIES UNITS; STUDENT ATTITUDES; STUDENT OPINION; STUDENT REACTION

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 36P.; NOT AVAILABLE IN HARD COPY FROM EDRS DUE TO POOR REPRODUCIBILITY OF ORIGINAL DOCUMENT

ISSUE: RIEJUL78

ABSTRACT: THE DOCUMENT CONTAINS SEVEN LEARNING ACTIVITIES FOR JUNIOR HIGH STUDENTS ON THE ENERGY SITUATION. OBJECTIVES ARE TO HELP STUDENTS GAIN UNDERSTANDING AND KNOWLEDGE ABOUT THE RELATIONSHIPS BETWEEN HUMANS AND THEIR SOCIAL AND PHYSICAL ENVIRONMENTS; SOLVE PROBLEMS AND CLARIFY ISSUES; EXAMINE PERSONAL BELIEFS AND VALUES; AND RECOGNIZE THE RELATIONSHIPS BETWEEN BELIEFS, VALUES, AND INDIVIDUAL BEHAVIOR. THE FIRST UNIT, "FOR REAL," IS A SOCIAL STUDIES AND SCIENCE TEACHERS COOPERATE IN THESE EXPERIMENTS THE HEAT VALUE OF PEAT IS COMPARED TO OTHER MATERIALS AND IT IS SUGGESTED THAT PEAT BE USED FOR ENERGY PRODUCTION. STUDENTS COLLECT INFORMATION ABOUT THE ENERGY SITUATION IN THE SECOND UNIT. THEY PLAY AN ENERGY GAME AND DEVELOP A QUESTIONAIRE TO SAMPLE STUDENT AND COMMUNITY OPINIONS ABOUT ENERGY. THE THIRD UNIT, "IMPLICATIONS," IS A TOOL WHICH HELPS STUDENTS EXAMINE POSSIBILITIES, COMPLEXITIES, INTERRELATIONSHIPS, AND IMPLICATIONS OF TRENDS AND INNOVATIONS. IN THE OTHER FOUR UNITS STUDENTS COMPARE THE DIFFERENCES ENERGY HAS MADE IN LIFESTYLES; CONSIDER THE IMPLICATIONS OF ALTERNATIVE LIVING AS ENERGY CONSERVATION; DISCUSS WHAT THEY LOVE AND HATE ABOUT POWER/ENERGY; AND EXPLORE THE FUTURE IN TERMS OF THEIR OWN LIFE STYLES. (AUTHOR/JK)

INSTITUTION NAME: MINNESOTA STATE ENERGY AGENCY, ST. PAUL.

ACCESSION NUMBER: ED151927

CLEARINGHOUSE ACCESSION NUMBER: EA010423

PUBLICATION DATE: 31 MAR 78

TITLE: A STUDY OF GOAL PREFERENCES REGARDING AN ENERGY CRISIS CONTINGENCY PLAN: THE SCHOOL WITHOUT SCHOOLS PROGRAM.

PERSONAL AUTHOR: KIM, MARY T.; LOADMAN, WILLIAM E.

DESCRIPTOR: ADMINISTRATIVE PERSONNEL; BOARDS OF EDUCATION; *CONTINGENCY MANAGEMENT; EDUCATIONAL ALTERNATIVES; *EDUCATIONAL OBJECTIVES; ELEMENTARY SECONDARY EDUCATION; *EMERGENCY PROGRAMS; ENERGY CONSERVATION; RATING SCALES; *SCHOOL PERSONNEL; SCHOOL SURVEYS; STATISTICAL ANALYSIS; TEACHERS; COLUMBUS PUBLIC SCHOOLS OH

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$2.06 PLUS POSTAGE.

DESCRIPTIVE NOTE: 32P.; PAPER PRESENTED AT THE ANNUAL MEETING OF THE AMERICAN EDUCATIONAL RESEARCH ASSOCIATION (TORONTO, ONTARIO, MARCH 27-31, 1978); LAST PAGE MAY BE MARGINALLY LEGIBLE DUE TO LIGHT PRINT

ISSUE: RIEAUG78

ABSTRACT: THE STUDY EXAMINES GOAL PREFERENCES REGARDING EMERGENCY EDUCATIONAL PROGRAMS SUCH AS THE COLUMBUS SCHOOL WITHOUT SCHOOLS PROGRAM CONDUCTED DURING THE ENERGY SHORTAGES OF 1977. PREFERENCES OF DIVERSE EDUCATOR GROUPS WERE ANALYZED BY THE MULTI-DIMENSIONAL SCALING PROGRAM MDPREF. A TWO-DIMENSIONAL SOLUTION WAS OBTAINED, THE FIRST DIMENSION BEING AN IDEAL VS. PRACTICAL DIMENSION, THE SECOND BEING AN ADMINISTRATIVE VS. SOCIAL CONCERNS DIMENSION. CONSENSUS EXISTED ON THE IDEAL PROGRAM GOALS; HOWEVER, IDEAL GOALS WERE PERCEIVED AS HAVING LESS CHANCE OF SUCCEEDING DURING ALTERNATIVE EMERGENCY PROGRAMS THAN MORE PRACTICAL, SHORT-TERM GOALS. THESE OUTCOMES ARE OF IMPORT FOR PERSONS CONCERNED WITH CRISIS-RELATED SCHOOL CLOSINGS. (AUTHOR)

ACCESSION NUMBER: ED151946

CLEARINGHOUSE ACCESSION NUMBER: EA010443

PROGRAM AREA: 95

PUBLICATION DATE: DEC 77

TITLE: A STUDY OF SCHOOL WITHOUT SCHOOLS: THE COLUMBUS, OHIO PUBLIC SCHOOLS DURING THE NATURAL GAS SHORTAGE, WINTER, 1977. VOLUME I AND VOLUME II, APPENDICES.

PERSONAL AUTHOR: SANDERS, JAMES R.; STUFFLEBEAM, DANIEL L.

INSTITUTION CODE: MVK95625

SPONSORING AGENCY CODE: PGK57295

DESCRIPTOR: CASE STUDIES (EDUCATION); CLASSROOM RESEARCH; *DELIVERY SYSTEMS; DEPLETED RESOURCES; *EDUCATIONAL ALTERNATIVES; EDUCATIONAL INNOVATION; EDUCATIONAL STRATEGIES; ELEMENTARY SECONDARY EDUCATION; *EMERGENCY PROGRAMS; MASS MEDIA; PROGRAM EVALUATION; *SCHOOL CLOSING; SCHOOL COMMUNITY COOPERATION; SCIENCE EDUCATION; TEACHING TECHNIQUES; UTILITIES; COLUMBUS PUBLIC SCHOOLS OH; *SCHOOL WITHOUT SCHOOLS

EDRS PRICE: EDRS PRICE MF-$1.33 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 675P.; NOT AVAILABLE IN PAPER COPY DUE TO MARGINAL LEGIBILITY OF PARTS OF DOCUMENT; NEWSPAPER REPRINTS MAY BE ILLEGIBLE; PAGES 165-170 OF VOLUME II ARE DELETED DUE TO COPYRIGHT RESTRICTIONS

ISSUE: RIEAUG78

ABSTRACT: THE ENERGY CRISIS, SPECIFICALLY A SHORTAGE OF NATURAL GAS, CAUSED BY THE UNUSUALLY COLD WINTER OF 1977, RESULTED IN THE COLUMBUS, OHIO, SCHOOLS BEING CLOSED FOR A MONTH. SCHOOLS HEATED WITH GAS WERE CLOSED, BUT STUDENTS MET ONE DAY A WEEK IN SCHOOL BUILDINGS THAT USED COAL, OIL, OR ELECTRICITY. THE EDUCATIONAL PROGRAM CONTINUED WITH SCHOOL PERSONNEL ENCOURAGED TO USE MAXIMUM CREATIVITY IN MAKING ASSIGNMENTS AND MAINTAINING CONTACTS WITH PUPILS. SPECIAL SECTIONS WERE PUBLISHED IN THE NEWSPAPERS, AND RADIO AND TELEVISION STATIONS ALLOCATED TIME FOR EDUCATIONAL PROGRAMS. THIS REPORT IS A DESCRIPTION OF THE RESPONSES TO THE SCHOOL CLOSING MADE BY THE EDUCATION SYSTEM AND SURROUNDING COMMUNITY. METHODS USED IN THE STUDY INCLUDED CLASSROOM OBSERVATION; SITE OBSERVATION; AND A MAIL SURVEY OF A SAMPLE OF STUDENTS, PARENTS, AND TEACHERS. (RLF)

CONTRACT NUMBER: NSF-C-7621134

INSTITUTION NAME: WESTERN MICHIGAN UNIV., KALAMAZOO. SCHOOL OF EDUCATION.

SPONSORING AGENCY NAME: NATIONAL SCIENCE FOUNDATION, WASHINGTON, D.C.

ACCESSION NUMBER: ED152345

CLEARINGHOUSE ACCESSION NUMBER: JC780214

PUBLICATION DATE: 76

TITLE: ENERGY TECHNOLOGY TRAINING CONFERENCE PROCEEDINGS (ATLANTA, GEORGIA, OCTOBER 27-29, 1976).

INSTITUTION CODE: BBB01044

SPONSORING AGENCY CODE: BBB07317; BBB13553

DESCRIPTOR: COMMUNITY COLLEGES; CONFERENCE REPORTS; CURRICULUM DEVELOPMENT; EMPLOYER ATTITUDES; *ENERGY; FEDERAL AID; FINANCIAL SUPPORT; JOB SKILLS; *JUNIOR COLLEGES; LABOR SUPPLY; MANPOWER DEVELOPMENT; MANPOWER NEEDS; *PETROLEUM INDUSTRY; POST SECONDARY EDUCATION; PROGRAM DEVELOPMENT; SCHOOL INDUSTRY RELATIONSHIP; *SOLAR RADIATION; *TECHNICAL EDUCATION; TECHNICAL OCCUPATIONS; *COAL MINING TECHNOLOGY; *NUCLEAR TECHNOLOGY

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$3.50 PLUS POSTAGE.

DESCRIPTIVE NOTE: 68P.; PAGES 30-31 OF THE ORIGINAL DOCUMENT MAY REPRODUCE POORLY

ISSUE: RIEAUG78

ABSTRACT: CONFERENCE GOALS INCLUDED IDENTIFYING PROJECTED TECHNICAL MANPOWER NEEDS AND SKILL MIX REQUIREMENTS, POTENTIAL OBSTACLES TO DEVELOPING AN ADEQUATE TECHNICAL EDUCATION BASE, AND STIMULATING EDUCATION, INDUSTRY, AND LABOR COOPERATION IN TECHNICAL PROGRAM DEVELOPMENT AND FEDERAL INTERAGENCY COORDINATION AND CUOPERATION. FINDINGS OF THE CONFERENCE INDICATED: NATIONAL DATA RARELY REFLECTED LOCAL EMPLOYMENT DEMANDS; PROPRIETARY CONCERNS OF EMPLOYERS RESTRICTED ACCESS TO EMPLOYMENT TREND DATA; LIMITED EXCHANGE OF ENERGY-RELATED SKILL SUPPLY DATA WAS EVIDENT BETWEEN COLLEGES; COLLEGE INTAKE AND PLACEMENT POLICIES RESTRICTED OPPORTUNITIES TO MEET REGIONAL AND NATIONAL NEEDS; UNIFORM ENERGY OCCUPATIONAL CATEGORIES WERE LACKING; HIGH TECHNOLOGY PROGRAMS REQUIRED EQUIPMENT AND FACILITIES THAT WERE TOO COSTLY FOR MOST COLLEGES; FEDERAL FUNDS TENDED TO FAVOR START-UP SUPPORT RATHER THAN TO STRENGTHEN EXISTING PROGRAMS; AND INDUSTRIAL EMPLOYERS DID NOT UNIVERSALLY ACCEPT THAT COLLEGES PRODUCE QUALITY EMPLOYEES. RECOMMENDATIONS FOR AMELIORATING THESE PROBLEMS ARE MADE. REPORTS ON TECHNOLOGY WORKSHOPS IN THE COAL, NUCLEAR, PETROLEUM, AND SOLAR ENERGY FIELDS INCLUDE A SUMMARY OF TECHNICIAN NEEDS; SKILL REQUIREMENTS; INDUSTRY ASSESSMENT OF COMMUNITY COLLEGE PROGRAMS, COOPERATIVE TRAINING PROGRAMS, EXISTING PROGRAMS AND CURRICULA; INSTRUCTOR QUALIFICATIONS; AND ECONOMY OF SCALE IN EACH FIELD. (TK)

REPORT NUMBER: CONF-761066

CONTRACT NUMBER: EY-76-C-05-003

INSTITUTION NAME: OAK RIDGE ASSOCIATED UNIVERSITIES, TENN.

SPONSORING AGENCY NAME: AMERICAN ASSOCIATION OF COMMUNITY AND JUNIOR COLLEGES, WASHINGTON, D.C.; ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION, WASHINGTON, D.C.

ACCESSION NUMBER: ED152529

CLEARINGHOUSE ACCESSION NUMBER: SE024005

PUBLICATION DATE: 77

TITLE: SCIENCE ACTIVITIES IN ENERGY: CHEMICAL ENERGY.

INSTITUTION CODE: BBB01044; BBB11310

SPONSORING AGENCY CODE: BBB15419

DESCRIPTOR: *CHEMICAL REACTIONS; ELEMENTARY EDUCATION; *ELEMENTARY SCHOOL SCIENCE; *ENERGY; *ENVIRONMENTAL EDUCATION; INSTRUCTIONAL MATERIALS; LABORATORY EXPERIMENTS; *SCIENCE ACTIVITIES; SCIENCE EDUCATION; SCIENCE UNITS

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$2.06 PLUS POSTAGE.

DESCRIPTIVE NOTE: 30P.; FOR RELATED DOCUMENTS, SEE SE 024 006-008

ISSUE: RIEAUG78

ABSTRACT: PRESENTED IS A SCIENCE ACTIVITIES IN ENERGY PACKAGE WHICH INCLUDES 15 ACTIVITIES RELATING TO CHEMICAL ENERGY. ACTIVITIES ARE SIMPLE, CONCRETE EXPERIMENTS FOR FOURTH, FIFTH AND SIXTH GRADES WHICH ILLUSTRATE PRINCIPLES AND PROBLEMS RELATING TO ENERGY. EACH ACTIVITY IS OUTLINED ON A SINGLE CARD WHICH IS INTRODUCED BY A QUESTION. A TEACHER'S SUPPLEMENT IS INCLUDED. (SL)

REPORT NUMBER: EDH-105419-77)

INSTITUTION NAME: CALIFORNIA UNIV., BERKELEY. LAWRENCE HALL OF SCIENCE.; OAK RIDGE ASSOCIATED UNIVERSITIES, TENN.

SPONSORING AGENCY NAME: DEPARTMENT OF ENERGY, WASHINGTON, D.C.

ACCESSION NUMBER: ED152530

CLEARINGHOUSE ACCESSION NUMBER: SE024006

PUBLICATION DATE: 77

TITLE: SCIENCE ACTIVITIES IN ENERGY: ELECTRICAL ENERGY.

INSTITUTION CODE: BBB01044; BBB11310

SPONSORING AGENCY CODE: BBB15419

DESCRIPTOR: *ELECTRICITY; ELEMENTARY EDUCATION; *ELEMENTARY SCHOOL SCIENCE; *ENERGY; *ENVIRONMENTAL EDUCATION; INSTRUCTIONAL MATERIALS; LABORATORY EXPERIMENTS; *SCIENCE ACTIVITIES; SCIENCE EDUCATION; SCIENCE UNITS

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$2.06 PLUS POSTAGE.

DESCRIPTIVE NOTE: 34P.; FOR RELATED DOCUMENTS, SEE SE 024 005-008

ISSUE: RIEAUG78

ABSTRACT: PRESENTED IS A SCIENCE ACTIVITIES IN ENERGY PACKAGE WHICH INCLUDES 16 ACTIVITIES RELATING TO ELECTRICAL ENERGY. ACTIVITIES ARE SIMPLE, CONCRETE EXPERIMENTS FOR FOURTH, FIFTH AND SIXTH GRADES WHICH ILLUSTRATE PRINCIPLES AND PROBLEMS RELATING TO ENERGY. EACH ACTIVITY IS OUTLINED IN A SINGLE CARD WHICH IS INTRODUCED BY A QUESTION. A TEACHER'S SUPPLEMENT IS INCLUDED. (SL)

REPORT NUMBER: EDH-105319-77)

INSTITUTION NAME: CALIFORNIA UNIV., BERKELEY. LAWRENCE HALL OF SCIENCE.; OAK RIDGE ASSOCIATED UNIVERSITIES, TENN.

SPONSORING AGENCY NAME: DEPARTMENT OF ENERGY, WASHINGTON, D.C.

ACCESSION NUMBER: ED152531

CLEARINGHOUSE ACCESSION NUMBER: SE024007

PUBLICATION DATE: 77

TITLE: SCIENCE ACTIVITIES IN ENERGY: CONSERVATION.

INSTITUTION CODE: BBB01044; BBB11310

SPONSORING AGENCY CODE: BBB15419

DESCRIPTOR: *CONSERVATION (ENVIRONMENT); ELEMENTARY EDUCATION; *ELEMENTARY SCHOOL SCIENCE; *ENERGY; *ENVIRONMENTAL EDUCATION; INSTRUCTIONAL MATERIALS; LABORATORY EXPERIMENTS; *SCIENCE ACTIVITIES; SCIENCE EDUCATION; SCIENCE UNITS

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$2.06 PLUS POSTAGE.

DESCRIPTIVE NOTE: 32P.; FOR RELATED DOCUMENTS, SEE SE 024 005-008

ISSUE: RIEAUG78

ABSTRACT: PRESENTED IS A SCIENCE ACTIVITIES IN ENERGY PACKAGE WHICH INCLUDES 14 ACTIVITIES RELATING TO ENERGY CONSERVATION. ACTIVITIES ARE SIMPLE, CONCRETE EXPERIMENTS FOR FOURTH, FIFTH AND SIXTH GRADES, WHICH ILLUSTRATE PRINCIPLES AND PROBLEMS RELATING TO ENERGY. EACH ACTIVITY IS OUTLINED ON A SIMPLE CARD WHICH IS INTRODUCED BY A QUESTION. A TEACHER'S SUPPLEMENT IS INCLUDED. (SL)

REPORT NUMBER: EDH-1049

INSTITUTION NAME: CALIFORNIA UNIV., BERKELEY. LAWRENCE HALL OF SCIENCE.; OAK RIDGE ASSOCIATED UNIVERSITIES, TENN.

SPONSORING AGENCY NAME: DEPARTMENT OF ENERGY, WASHINGTON, D.C.

ACCESSION NUMBER: ED152532

CLEARINGHOUSE ACCESSION NUMBER: SE024008

PUBLICATION DATE: 77

TITLE: SCIENCE ACTIVITIES IN ENERGY: SOLAR ENERGY.

INSTITUTION CODE: BBB01044; BBB11310

SPONSORING AGENCY CODE: BBB15419

DESCRIPTOR: ELEMENTARY EDUCATION; *ELEMENTARY SCHOOL SCIENCE; *ENERGY; *ENVIRONMENTAL EDUCATION; INSTRUCTIONAL MATERIALS; LABORATORY EXPERIMENTS; *SCIENCE ACTIVITIES; SCIENCE EDUCATION; SCIENCE UNITS; *SOLAR RADIATION

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$2.06 PLUS POSTAGE.

DESCRIPTIVE NOTE: 27P.; FOR RELATED DOCUMENTS, SEE SE 024 005-007

ISSUE: RIEAUG78

ABSTRACT: PRESENTED IS A SCIENCE ACTIVITIES IN ENERGY PACKAGE WHICH INCLUDES 12 ACTIVITIES RELATING TO SOLAR ENERGY. ACTIVITIES ARE SIMPLE, CONCRETE EXPERIMENTS FOR FOURTH, FIFTH, AND SIXTH GRADES WHICH ILLUSTRATE PRINCIPLES AND PROBLEMS RELATING TO ENERGY. EACH ACTIVITY IS OUTLINED ON A SINGLE CARD WHICH IS INTRODUCED BY A QUESTION. A TEACHER'S SUPPLEMENT IS INCLUDED. (SL)

REPORT NUMBER: EDR-837

INSTITUTION NAME: CALIFORNIA UNIV., BERKELEY. LAWRENCE HALL OF SCIENCE.; OAK RIDGE ASSOCIATED UNIVERSITIES, TENN.

SPONSORING AGENCY NAME: DEPARTMENT OF ENERGY, WASHINGTON, D.C.

ACCESSION NUMBER: ED152535

CLEARINGHOUSE ACCESSION NUMBER: SE024013

PUBLICATION DATE: 77

TITLE: IMPLICATIONS OF ENVIRONMENTAL REGULATIONS FOR ENERGY PRODUCTION AND CONSUMPTION. ANALYTICAL STUDIES FOR THE U.S. ENVIRONMENTAL PROTECTION AGENCY, VOLUME VI.

INSTITUTION CODE: BBB15442

SPONSORING AGENCY CODE: BBB06039

DESCRIPTOR: *COST EFFECTIVENESS; ENERGY; *ENERGY CONSERVATION; ENVIRONMENTAL CRITERIA; ENVIRONMENTAL EDUCATION; ENVIRONMENTAL RESEARCH; *GOVERNMENT PUBLICATIONS; NATURAL RESOURCES; *POLLUTION; *RESOURCE ALLOCATIONS; ENVIRONMENTAL PROTECTION AGENCY; *NATIONAL RESEARCH COUNCIL

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$12.71 PLUS POSTAGE.

DESCRIPTIVE NOTE: 246P.; CONTAINS SMALL PRINT IN TABLES

ISSUE: RIEAUG78

ABSTRACT: THIS REPORT IS ONE OF A SERIES PREPARED BY THE NATIONAL RESEARCH COUNCIL FOR THE U.S. ENVIRONMENTAL PROTECTION AGENCY. THIS REPORT TAKES A CRITICAL LOOK AT THE RELATIONSHIP OF ENERGY AND THE ENVIRONMENT AND FOCUSES ON THREE MAIN POLICY QUESTIONS: (1) DO ENVIRONMENTAL REGULATIONS MAKE TOO GREAT A DEMAND ON SCARCE RESOURCES OF ENERGY AND THE ECONOMY; (2) ARE OUR CURRENT POLLUTION CONTROL MEASURES COST-EFFECTIVE AND HOW CAN WE IMPROVE THEM; AND (3) WHAT ARE THE MAJOR TRADE-OFFS INVOLVED IN ENVIRONMENTAL REGULATIONS? CHAPTER TITLES INCLUDE: (1) BACKGROUND, OBJECTIVES, AND METHODOLOGY; (2) EFFECTS OF ENERGY SYSTEMS ON HEALTH AND THE ENVIRONMENT; (3) MAJOR ENERGY-ENVIRONMENT ISSUES; AND (4) CHALLENGES TO MANAGEMENT. THE EXECUTIVE SUMMARY LISTS SIX KEY RECOMMENDATIONS FROM THE REPORT. EACH CHAPTER HAS A LIST OF REFERENCES. THE APPENDICES INCLUDE: (1) A REVIEW OF ENERGY SYSTEMS, FUEL CYCLES, RESIDUALS, AND EFFECTS; (2) THE ENERGY/ENVIRONMENT MATRIX; AND (3) ENERGY CONVERSION FACTORS. (MK)

CONTRACT NUMBER: EPA-68-01-2430

AVAILABILITY: PRINTING AND PUBLISHING OFFICE, NATIONAL ACADEMY OF SCIENCES, 2101 CONSTITUTION AVENUE, WASHINGTON, D.C. 20418 ($8.25)

INSTITUTION NAME: NATIONAL ACADEMY OF SCIENCES - NATIONAL RESEARCH COUNCIL, WASHINGTON, D.C. COMMISSION ON NATURAL RESOURCES.

SPONSORING AGENCY NAME: ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, D. C.

ACCESSION NUMBER: ED152773

CLEARINGHOUSE ACCESSION NUMBER: SP012579

PUBLICATION DATE: JAN 77

TITLE: A TEACHER'S HANDBOOK ON ENERGY.

INSTITUTION CODE: BBB15519; XPT87150

DESCRIPTOR: BIBLIOGRAPHIES; CHARTS; CLASS ACTIVITIES; ELEMENTARY SECONDARY EDUCATION; *ENERGY CONSERVATION; *INSTRUCTIONAL AIDS; RESOURCE GUIDES; *RESOURCE MATERIALS

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$8.69 PLUS POSTAGE.

DESCRIPTIVE NOTE: 159P.

ISSUE: RIEAUG78

ABSTRACT: TRADITIONAL AND EVOLVING ATTITUDES TOWARD ENERGY AND THE COMPELLING REASONS FOR STUDYING ENERGY USE AND CONSERVATION ARE HIGHLIGHTED IN THIS GUIDE FOR ELEMENTARY-SECONDARY SCHOOL TEACHERS IN THE INSTRUCTION OF BASIC ENERGY ATTITUDES. SAMPLE LESSONS/ACTIVITIES/OBJECTIVES ARE PRESENTED FROM THREE APPROACHES: ATTITUDE DEVELOPMENT, DECISION MAKING, AND ACTION. CHARTS, GRAPHS, AND ILLUSTRATIONS ARE PROVIDED AS BACKGROUND MATERIAL FOR TEACHERS, AND THE LOOSE-LEAF FORMAT OF THE DOCUMENT ALLOWS FOR EASY REPRODUCTION. AN EXTENSIVE BIBLIOGRAPHY OF JOURNAL ARTICLES IS INCLUDED. (MJB)

INSTITUTION NAME: GOVERNOR'S ENERGY ADVISORY COUNCIL, AUSTIN, TEX.; TEXAS EDUCATION AGENCY, AUSTIN.

ACCESSION NUMBER: ED153034

CLEARINGHOUSE ACCESSION NUMBER: CE015672

PUBLICATION DATE: MAR 78

TITLE: A REVIEW OF ENERGY MODELS WITH PARTICULAR REFERENCE TO EMPLOYMENT AND MANPOWER ANALYSIS.

PERSONAL AUTHOR: ECKSTEIN, ALBERT J.; HELEN, DALE M.

INSTITUTION CODE: BBB13219

DESCRIPTOR: ECONOMIC RESEARCH; EMPLOYMENT; EMPLOYMENT PROBLEMS; *EMPLOYMENT PROJECTIONS; *ENERGY; *MANPOWER NEEDS; *MODELS; RESEARCH NEEDS; SOCIAL PROBLEMS

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$8.69 PLUS POSTAGE.

DESCRIPTIVE NOTE: 172P.

ISSUE: RIESEP78

ABSTRACT: TO ANALYZE THE APPLICATION OF QUANTITATIVE MODELS TO ENERGY-EMPLOYMENT ISSUES, THE ENERGY PROBLEM WAS VIEWED IN THREE DISTINCT, BUT RELATED, PHASES: THE POST-EMBARGO SHOCK EFFECTS, THE INTERMEDIATE-TERM PROCESS OF ADJUSTMENT, AND THE LONG-RUN EQUILIBRIUM. AGAINST THIS BACKGROUND EIGHTEEN EXISTING ENERGY MODELS (GOVERNMENT SUPPORTED AS WELL AS PRIVATE EFFORTS) WERE REVIEWED TO DETERMINE THEIR USEFULNESS IN ADDRESSING EMPLOYMENT PROBLEMS RELATED TO THE THREE PHASES. THE MODELS WERE DIVIDED INTO THREE MAIN CATEGORIES: (1) GENERAL-ECONOMY ENERGY-SECTOR INTERACTIONS MODELS, (2) ENERGY SECTOR MODELS; AND (3) ENERGY SUBSECTOR MODELS. THUS FAR, THE MODELS HAVE NOT BEEN UTILIZED IN ANY SIGNIFICANT WAY FOR THE STUDY OF EMPLOYMENT AND MANPOWER ISSUES. ONLY ONE OF THE CATEGORY 2 MODELS GENERATES DETAILED MANPOWER REQUIREMENTS ASSOCIATED WITH INCREASED INVESTMENT ACTIVITY; OTHERS IN THAT GROUP AS WELL AS SEVERAL COAL SECTOR MODELS COULD BE ADAPTED TO DO SO. OF GREATEST INTEREST WERE THE CATEGORY 1 MODELS, BUT MOST LACK PROPER PRICE DETERMINATION MECHANISM TO ADDRESS LONG-TERM QUESTIONS OF ADJUSTMENT TO ENERGY PRICE CHANGES. WHILE MOST OF THEM INCORPORATE AN INPUT-OUTPUT BLOCK TO WHICH LABOR DEMAND ESTIMATES ARE ATTACHED, THE QUALITY OF THE SPECIFICATIONS WAS FOUND INADEQUATE. BASED ON THE ANALYSIS, FIVE CATEGORIES OF EMPLOYMENT AND MANPOWER RESEARCH ISSUES ASSOCIATED WITH THE ENERGY PROBLEM WERE IDENTIFIED: SUBSTITUTION EFFECTS, BALANCE-OF-PAYMENTS EFFECTS, INVESTMENT AND NEW CONSTRUCTION EFFECTS, ECONOMIC GROWTH AND INFLATION, AND DISTRIBUTION OF INCOME. (REVIEWS OF EACH INDIVIDUAL MODEL ARE APPENDED.) (JT)

CONTRACT NUMBER: 20-51-77-43

INSTITUTION NAME: EMPLOYMENT AND TRAINING ADMINISTRATION (DOL), WASHINGTON, D.C.

ACCESSION NUMBER: ED153326

CLEARINGHOUSE ACCESSION NUMBER: EA010511

PUBLICATION DATE: 76

TITLE: PROCEEDINGS: INTERNATIONAL EX-STUDENTS' CONFERENCE ON ENERGY (AUSTIN, TEXAS, APRIL 26-30, 1976).

PERSONAL AUTHOR: FERGUSSON, CHARLES, ED.

INSTITUTION CODE: BBB15591

DESCRIPTOR: DEVELOPED NATIONS; *DEVELOPING NATIONS; *ECONOMIC FACTORS; *ENERGY; ENERGY CONSERVATION; FOOD; INTERNATIONAL RELATIONS; *PETROLEUM INDUSTRY; POLITICAL INFLUENCES; *PUBLIC POLICY; TABLES (DATA); TECHNOLOGY

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$12.71 PLUS POSTAGE.

DESCRIPTIVE NOTE: 230P.; SOME FIGURES MAY NOT REPRODUCE CLEARLY DUE TO SMALL PRINT

ISSUE: RIESEP78

ABSTRACT: THIS DOCUMENT CONTAINS THE SPEECHES, AND SUBSEQUENT DISCUSSION, PRESENTED AT THE INTERNATIONAL EX-STUDENT CONFERENCE ON ENERGY HELD AT THE UNIVERSITY OF TEXAS AT AUSTIN, APRIL 26-30, 1976. SPEAKERS INCLUDED TECHNICAL EXPERTS AND REPRESENTATIVES FROM AN OIL EXPORTING COUNTRY AND FROM DEVELOPED AND DEVELOPING OIL IMPORTING COUNTRIES. ENERGY SOURCES, TECHNOLOGIES, AND UTILIZATION CONSTRAINTS WERE CONSIDERED ALONG WITH THE IMPACT OF ENERGY ON THE QUALITY OF LIFE, FOOD PRODUCTION, INTERNATIONAL FINANCE, AND ECONOMIC GROWTH. (IRT)

INSTITUTION NAME: TEXAS UNIV., AUSTIN. CENTER FOR ENERGY STUDIES.

ACCESSION NUMBER: ED153819

CLEARINGHOUSE ACCESSION NUMBER: SE024108

PUBLICATION DATE: 77

TITLE: OKLAHOMA ENERGY AWARENESS EDUCATION, ENERGY EDUCATION ACTIVITIES, GRADES K-3.

INSTITUTION CODE: SBU68175

SPONSORING AGENCY CODE: BBB00077

DESCRIPTOR: *ACTIVITY UNITS; *ELEMENTARY EDUCATION; *ENERGY; ENERGY CONSERVATION; *ENVIRONMENTAL EDUCATION; *INSTRUCTIONAL MATERIALS; INTERDISCIPLINARY APPROACH;

NATURAL RESOURCES; *PRIMARY EDUCATION; UNITS OF STUDY; *OKLAHOMA

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 176P.; FOR RELATED DOCUMENTS, SEE SE 024 109-110; NOT AVAILABLE IN HARD COPY DUE TO MARGINAL LEGIBILITY OF ORIGINAL DOCUMENT

ISSUE: RIESEP78

ABSTRACT: THIS PUBLICATION CONTAINS ENERGY EDUCATION ACTIVITIES FOR GRADES K THROUGH 3 AND IS PART OF A SET OF THREE PUBLICATIONS. THESE ACTIVITIES ARE ORGANIZED UNDER FIVE ENERGY CONCEPTS: (1) ENERGY IS SO BASIC THAT NOTHING MOVES WITHOUT IT; (2) CONSERVATION OF ENERGY; (3) THERE ARE OTHER ENERGY ALTERNATIVES; (4) SOCIETY DEPENDS ON ENERGY; AND (5) THE PRODUCTION AND DISTRIBUTION OF ENERGY HAVE ENVIRONMENTAL AND ECONOMIC CONSEQUENCES. THIS PUBLICATION IS CONSTRUCTED IN A LOOSELEAF FASHION TO FACILITATE THE REPRODUCTION OF ACTIVITIES. PURPOSE, CONCEPT OR OBJECTIVE, MATERIALS, AND ACTIVITY DESCRIPTION ARE GIVEN FOR EACH ACTIVITY. ACTIVITIES INVOLVE STUDENTS IN GAMES, VALUES CLARIFICATIONS, AND INDEPENDENT INVESTIGATIONS. ACTIVITIES MAY BE SELECTED AND USED IN THE CURRICULUM AS DESIRED TO ACHIEVE AN INTERDISCIPLINARY APPROACH. (MR)

INSTITUTION NAME: OKLAHOMA STATE DEPT. OF EDUCATION, OKLAHOMA CITY.

SPONSORING AGENCY NAME: BUREAU OF ELEMENTARY AND SECONDARY EDUCATION (DHEW/OE), WASHINGTON, D.C.

ACCESSION NUMBER: ED153820

CLEARINGHOUSE ACCESSION NUMBER: SE024109

PUBLICATION DATE: 77

TITLE: OKLAHOMA ENERGY AWARENESS EDUCATION, ENERGY EDUCATION ACTIVITIES, GRADES 4-12.

INSTITUTION CODE: SBU68175

SPONSORING AGENCY CODE: 88800077

DESCRIPTOR: ACTIVITY UNITS; *ELEMENTARY SECONDARY EDUCATION; *ENERGY; *ENERGY CONSERVATION; ENVIRONMENTAL EDUCATION; *EXPERIENTIAL LEARNING; *INSTRUCTIONAL MATERIALS; *INTERDISCIPLINARY APPROACH; NATURAL RESOURCES; UNITS OF STUDY; *OKLAHOMA

EDRS PRICE: [illegible]S PRICE MF-$0.83 HC-$11.37 PLUS POSTAGE.

DESCRIPTIVE NOTE: 220P.; FOR RELATED DOCUMENTS, SEE SE 024 108-110; PAGE 163 MISSING FROM DOCUMENT PRIOR TO ITS BEING SHIPPED TO EDRS FOR FILMING; CONTAINS OCCASIONAL SMALL, LIGHT AND BROKEN TYPE

ISSUE: RIESEP78

ABSTRACT: THIS PUBLICATION CONTAINS ENERGY EDUCATION ACTIVITIES FOR GRADES K THROUGH 12 AND IS PART OF A SET OF THREE PUBLICATIONS. THESE ACTIVITIES ARE ORGANIZED UNDER FIVE ENERGY CONCEPTS: (1) ENERGY IS SO BASIC THAT NOTHING MOVES WITHOUT IT; (2) CONSERVATION OF ENERGY; (3) THERE ARE OTHER ENERGY ALTERNATIVES; (4) SOCIETY DEPENDS ON ENERGY; AND (5) THE PRODUCTION AND DISTRIBUTION OF ENERGY HAVE ENVIRONMENTAL AND ECONOMIC CONSEQUENCES. THIS PUBLICATION IS CONSTRUCTED IN A LOOSELEAF FASHION TO FACILITATE THE REPRODUCTION OF ACTIVITIES. GRADE LEVEL, OBJECTIVE, MATERIALS, AND A DESCRIPTION ARE GIVEN FOR EACH ACTIVITY. THE VARIETY OF ACTIVITIES INCLUDE LABORATORY EXPERIMENTS, VALUES CLARIFICATION EXERCISES, SIMULATIONS, GAMES, AND INDEPENDENT STUDENT INVESTIGATIONS. ACTIVITIES ARE INCLUDED THAT MAY BE USED IN ONE OR MORE SUBJECT AREAS SO THAT AN INTERDISCIPLINARY APPROACH TO ENERGY EDUCATION IS ACHIEVED. (MR)

INSTITUTION NAME: OKLAHOMA STATE DEPT. OF EDUCATION, OKLAHOMA CITY.

SPONSORING AGENCY NAME: BUREAU OF ELEMENTARY AND SECONDARY EDUCATION (DHEW/OE), WASHINGTON, D.C.

ACCESSION NUMBER: ED153821

CLEARINGHOUSE ACCESSION NUMBER: SE024110

PUBLICATION DATE: 77

TITLE: OKLAHOMA ENERGY AWARENESS EDUCATION, RESOURCE MATERIALS.

INSTITUTION CODE: SBU68175

SPONSORING AGENCY CODE: 88800077

DESCRIPTOR: ACTIVITY UNITS; *ENERGY; *ENERGY CONSERVATION; ENVIRONMENTAL EDUCATION; *INSTRUCTIONAL MATERIALS; *INTERDISCIPLINARY APPROACH; NATURAL RESOURCES; RESOURCE ALLOCATION; *TEACHING GUIDES; *OKLAHOMA

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$4.67 PLUS POSTAGE.

DESCRIPTIVE NOTE: 98P.; FOR RELATED DOCUMENTS, SEE SE 024 108-109; PAGES 27-28 MISSING FROM DOCUMENT PRIOR TO ITS BEING SHIPPED TO EDRS FOR FILMING; CONTAINS OCCASIONAL LIGHT TYPE

ISSUE: RIESEP78

ABSTRACT: THIS PUBLICATION IS THE TEACHER'S REFERENCE OF A SERIES OF THREE ENERGY EDUCATION PUBLICATIONS. THIS TEACHER'S REFERENCE HANDBOOK PROVIDES BACKGROUND INFORMATION AND SOME MATERIALS TO AID THE TEACHER IN USING THE ACTIVITIES IN THE OTHER TWO PUBLICATIONS. THE MANY CHARTS, GRAPHS, AND ILLUSTRATIONS ARE DESIGNED TO PROVIDE THE TEACHER WITH GRAPHIC WAYS TO ASSIST STUDENTS IN UNDERSTANDING ENERGY PROBLEMS AND CONCEPTS. THE LOOSELEAF CONSTRUCTION OF THIS PUBLICATION WILL ENABLE THE TEACHER TO REMOVE SPECIFIC PAGES FOR REPRODUCTION. TOPICS DISCUSSED IN THE TWELVE CHAPTERS OF THIS PUBLICATION INCLUDE THE ENERGY CONSERVATION ETHIC, DEFINITION OF ENERGY, SELECTED FORMS OF ENERGY USED BY MAN, FUTURE CAPITAL REQUIREMENTS FOR ENERGY, AND ENERGY CONSERVATION IN AGRICULTURE. CHAPTER 10 IS A GLOSSARY OF ENERGY TERMS. CHAPTER 11 LISTS SOME SELECTED SOURCES OF ENERGY INFORMATION. (MR)

INSTITUTION NAME: OKLAHOMA STATE DEPT. OF EDUCATION, OKLAHOMA CITY.

SPONSORING AGENCY NAME: BUREAU OF ELEMENTARY AND SECONDARY EDUCATION (DHEW/OE), WASHINGTON, D.C.

ACCESSION NUMBER: ED153841

CLEARINGHOUSE ACCESSION NUMBER: SE024167

PUBLICATION DATE: FEB 78

TITLE: INTERDISCIPLINARY STUDENT/TEACHER MATERIALS IN ENERGY, THE ENVIRONMENT, AND THE ECONOMY: AGRICULTURE, ENERGY, AND SOCIETY, GRADES 10, 11, 12.

PERSONAL AUTHOR: BROCK, PHYLLIS; AND OTHERS

INSTITUTION CODE: FGK57300

SPONSORING AGENCY CODE: 88815531

DESCRIPTOR: *AGRICULTURAL EDUCATION; ECONOMICS; *ENERGY; *FOOD; *INSTRUCTIONAL MATERIALS; INTEGRATED CURRICULUM; SCIENCE EDUCATION; *SECONDARY EDUCATION; SOCIAL SCIENCES; *TEACHING GUIDES

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 102P.; FOR RELATED DOCUMENTS, SEE SE 024 168-172 AND SE 024 218; NOT AVAILABLE IN HARD COPY DUE TO MARGINAL LEGIBILITY OF ORIGINAL DOCUMENT

ISSUE: RIESEP78

ABSTRACT: THIS INTERDISCIPLINARY INSTRUCTIONAL UNIT CONTAINS ELEVEN LESSONS FOR GRADES 10-12 WHICH FOCUS ON THE ENERGY COMPONENT OF FOOD PRODUCTION. THERE ARE LESSONS WHICH CONTRAST FOOD PRODUCTION SYSTEMS IN VARIOUS CULTURES AND ALSO LESSONS WHICH LOOK AT DIFFERENT SYSTEMS AND TECHNIQUES IN USE IN THIS COUNTRY. THERE ARE LESSONS DEALING WITH ORGANIC FARMING AND WITH THE USE OF WILD FOODS. EACH LESSON GIVES AN OVERVIEW, TARGET AUDIENCE, OBJECTIVES, MATERIALS, TIME ALLOTMENT, AND TEACHING STRATEGIES, IN ADDITION TO STUDENT WORKSHEETS. (BB)

REPORT NUMBER: EDM-1034

CONTRACT NUMBER: EX-76-C-10-3841

AVAILABILITY: U.S. DEPARTMENT OF ENERGY, TECHNICAL INFORMATION OFFICE, P.O. BOX 62, OAK RIDGE, TENNESSEE 37830 (NO PRICE QUOTED)

INSTITUTION NAME: NATIONAL SCIENCE TEACHERS ASSOCIATION, WASHINGTON, D.C.

SPONSORING AGENCY NAME: BUREAU OF INTERGOVERNMENTAL AND INSTITUTIONAL RELATIONS (DOE), WASHINGTON, D.C. OFFICE OF EDUCATION, BUSINESS AND LABOR AFFAIRS.

ACCESSION NUMBER: ED153842

CLEARINGHOUSE ACCESSION NUMBER: SE024168

PUBLICATION DATE: OCT 77

TITLE: INTERDISCIPLINARY STUDENT/TEACHER MATERIALS IN ENERGY, THE ENVIRONMENT, AND THE ECONOMY: 1, HOW A BILL BECOMES A LAW TO CONSERVE ENERGY, GRADES 9, 11, 12.

PERSONAL AUTHOR: BROCK, PHYLLIS; AND OTHERS

INSTITUTION CODE: FGK57300

SPONSORING AGENCY CODE: 88815531

DESCRIPTOR: *ENERGY; ENVIRONMENT; FEDERAL LEGISLATION; *INSTRUCTIONAL MATERIALS; *INTEGRATED CURRICULUM; SCIENCE EDUCATION; *SECONDARY EDUCATION; *SOCIAL SCIENCES; *TEACHING GUIDES

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 122P.; FOR RELATED DOCUMENTS, SEE SE 024 167-172 AND SE 024 218; NOT AVAILABLE IN HARD COPY DUE TO MARGINAL LEGIBILITY OF ORIGINAL DOCUMENT

ISSUE: RIESEP78

ABSTRACT: THIS INSTRUCTIONAL UNIT FOR SECONDARY SCHOOL STUDENTS IS DESIGNED TO INTEGRATE FACTS AND CONCEPTS OF ENERGY, ENVIRONMENT, AND ECONOMICS INTO THE STUDY OF THE PROCESS OF MAKING AND APPLYING A LAW (THE FIFTY-FIVE MILE-PER-HOUR SPEED LIMIT LAW). THE UNIT CONTAINS ACTIVITIES ON THE LEGISLATIVE PROCESS DESIGNED TO FIT INTO TRADITIONAL SEGMENTS OF INSTRUCTION IN U.S. HISTORY, GOVERNMENT, OR CIVICS COURSES. ACTIVITIES CONTAINING LEARNING EXERCISES ON CONSTRUCTING AND INTERPRETING GRAPHS AND TABLES ARE SUITABLE FOR SCIENCE OR MATHEMATICS COURSES. THE ACTIVITIES ARE INTENDED TO ENCOURAGE INTERDISCIPLINARY TEACHING. THIS UNIT CONTAINS COMPLETE TEACHER AND STUDENT MATERIALS INCLUDING A PRE-TEST, BACKGROUND READING, OBJECTIVES, TEACHING STRATEGIES, AND SUGGESTIONS FOR EVALUATION. (BB)

REPORT NUMBER: EDM-1033

CONTRACT NUMBER: EX-76-C-10-3841

AVAILABILITY: U.S. DEPARTMENT OF ENERGY, TECHNICAL INFORMATION OFFICE, P.O. BOX 62, OAK RIDGE, TENNESSEE 37830 (NO PRICE QUOTED)

INSTITUTION NAME: NATIONAL SCIENCE TEACHERS ASSOCIATION, WASHINGTON, D.C.

SPONSORING AGENCY NAME: BUREAU OF INTERGOVERNMENTAL AND INSTITUTIONAL RELATIONS (DOE), WASHINGTON, D.C. OFFICE OF EDUCATION, BUSINESS AND LABOR AFFAIRS.

ACCESSION NUMBER: ED153843

CLEARINGHOUSE ACCESSION NUMBER: SE024169

PUBLICATION DATE: OCT 77

TITLE: INTERDISCIPLINARY STUDENT/TEACHER MATERIALS IN ENERGY, THE ENVIRONMENT, AND THE ECONOMY: 3, ENERGY, ENGINES, AND THE INDUSTRIAL REVOLUTION, GRADES 8, 9.

PERSONAL AUTHOR: CHILDS, BARBARA; AND OTHERS

INSTITUTION CODE: PGK57300

SPONSORING AGENCY CODE: 88815531

DESCRIPTOR: ECONOMIC EDUCATION; *ENERGY; HISTORY; INDUSTRIALIZATION; *INSTRUCTIONAL MATERIALS; INTEGRATED CURRICULUM; *SCIENCE EDUCATION; *SECONDARY EDUCATION; *SOCIAL STUDIES; *TEACHING GUIDES

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 80P.; FOR RELATED DOCUMENTS, SEE SE 024 167-172 AND SE 024 218; NOT AVAILABLE IN HARD COPY DUE TO MARGINAL LEGIBILITY OF ORIGINAL DOCUMENT

ISSUE: RIESEP78

ABSTRACT: THIS INSTRUCTIONAL UNIT FOR GRADES 8-9 COMBINES SCIENCE AND SOCIAL STUDIES IN A LOOK AT THE BROAD SOCIAL AND ECONOMIC UPHEAVALS THAT TOOK PLACE DURING THE INDUSTRIAL REVOLUTION, GIVING SPECIAL EMPHASIS TO THE ROLE OF ENERGY. THE INVENTION AND DEVELOPMENT OF THE STEAM ENGINE IS HIGHLIGHTED IN ONE LESSON. OTHER LESSONS SHOW HOW THE INDUSTRIAL REVOLUTION AFFECTED THE LOCATION AND GROWTH OF CITIES AROUND SITES OF ENERGY SOURCES, AND GIVE GREATER UNDERSTANDING OF THE EFFECTS OF TECHNOLOGY ON THE DAILY LIVES OF PEOPLE. THERE ARE FIVE LESSONS IN ALL, TWO RELATING TO SCIENCE AND THREE TO SOCIAL STUDIES. COMPLETE TEACHER AND STUDENT MATERIALS ARE INCLUDED. (BB)

REPORT NUMBER: EDM-1032

CONTRACT NUMBER: EX-76-C-10-3841

AVAILABILITY: U.S. DEPARTMENT OF ENERGY, TECHNICAL INFORMATION OFFICE, P.O. BOX 62, OAK RIDGE, TENNESSEE 37830 (NO PRICE QUOTED)

INSTITUTION NAME: NATIONAL SCIENCE TEACHERS ASSOCIATION, WASHINGTON, D.C.

SPONSORING AGENCY NAME: BUREAU OF INTERGOVERNMENTAL AND INSTITUTIONAL RELATIONS (DOE), WASHINGTON, D.C. OFFICE OF EDUCATION, BUSINESS AND LABOR AFFAIRS.

ACCESSION NUMBER: ED153844

CLEARINGHOUSE ACCESSION NUMBER: SE024170

PUBLICATION DATE: OCT 77

TITLE: INTERDISCIPLINARY STUDENT/TEACHER MATERIALS IN ENERGY, THE ENVIRONMENT, AND THE ECONOMY: 4, TRANSPORTATION AND THE CITY, GRADES 8, 9.

PERSONAL AUTHOR: CHILDS, BARBARA; AND OTHERS

INSTITUTION CODE: PGK57300

SPONSORING AGENCY CODE: 88815531

DESCRIPTOR: *CIVICS; *ENERGY; ENVIRONMENTAL EDUCATION; HISTORY; *INSTRUCTIONAL MATERIALS; *SECONDARY EDUCATION; *SOCIAL STUDIES; *TEACHING GUIDES; UNITED STATES HISTORY; URBANIZATION; *AUTOMOBILES

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 44P.; FOR RELATED DOCUMENTS, SEE SE 024 167-172 AND SE 024 218; NOT AVAILABLE IN HARD COPY DUE TO MARGINAL LEGIBILITY OF ORIGINAL DOCUMENT

ISSUE: RIESEP78

ABSTRACT: THIS INSTRUCTIONAL UNIT FOR GRADES EIGHT AND NINE TELLS WHY AND HOW AMERICAN SMALL TOWNS DECLINED AS A RESULT OF THE AVAILABILITY AND ACCEPTANCE OF AUTOMOBILES, AND IT TELLS OF THE GROWTH OF SUBURBS AND THEIR EFFECT ON THE CITY. THE LEARNING ACTIVITIES ALSO RELATE THE STORY OF THE DEMAND FOR CARS AND EXPLAIN THE STRAIN ON THE CITIES' SENSE OF SPACE, CLEAN AIR, AND SAFE STREETS. IN ONE OF THE LESSONS, THE STUDENTS SIMULATE A COURT TRIAL ON THE CHARGE - "THE CAR HAS DONE PERMANENT INJURY TO HUMANITY." THERE ARE FOUR LESSONS IN THIS UNIT. THEY ARE DESIGNED TO FIT INTO EXISTING SEGMENTS OF INSTRUCTION IN U.S. HISTORY AND CIVICS COURSES. COMPLETE TEACHER AND STUDENT MATERIALS ARE PROVIDED. (BB)

REPORT NUMBER: EDM-1031

CONTRACT NUMBER: EX-76-C-10-3841

AVAILABILITY: U.S. DEPARTMENT OF ENERGY, TECHNICAL INFORMATION OFFICE, P.O. BOX 62, OAK RIDGE, TENNESSEE 37830 (NO PRICE QUOTED)

INSTITUTION NAME: NATIONAL SCIENCE TEACHERS ASSOCIATION, WASHINGTON, D.C.

SPONSORING AGENCY NAME: BUREAU OF INTERGOVERNMENTAL AND INSTITUTIONAL RELATIONS (DOE), WASHINGTON, D.C. OFFICE OF EDUCATION, BUSINESS AND LABOR AFFAIRS.

ACCESSION NUMBER: ED153845

CLEARINGHOUSE ACCESSION NUMBER: SE024171

PUBLICATION DATE: OCT 77

TITLE: INTERDISCIPLINARY STUDENT/TEACHER MATERIALS IN ENERGY, THE ENVIRONMENT, AND THE ECONOMY: 5, COMMUNITY WORKERS AND THE ENERGY THEY USE, GRADE 2.

PERSONAL AUTHOR: BLOCH, LENORE; AND OTHERS

INSTITUTION CODE: PGK57300

SPONSORING AGENCY CODE: 88815531

DESCRIPTOR: ECONOMICS; ELEMENTARY EDUCATION; *ENERGY; ENVIRONMENT; GRADE 2; *INSTRUCTIONAL MATERIALS; *SCIENCE EDUCATION; *SOCIAL STUDIES; *TEACHING GUIDES

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$4.67 PLUS POSTAGE.

DESCRIPTIVE NOTE: 77P.; FOR RELATED DOCUMENTS, SEE SE 024 167-172 AND SE 024 218

ISSUE: RIESEP78

ABSTRACT: THIS INSTRUCTIONAL UNIT FOR THE SECOND GRADE IS INTENDED TO STIMULATE THE CHILD'S CURIOSITY TO KNOW MORE AND TO GRASP RELATIONSHIPS THROUGH A BLENDING OF IDEAS ABOUT ENERGY WITH A STUDY OF THE EFFECT OF THE USE OF ENERGY ON THE LIVELIHOOD OF PEOPLE IN THE COMMUNITY. THERE ARE FOUR LESSONS IN THE UNIT. THE FIRST, INTRODUCTION TO ENERGY, DEALS WITH THE QUESTION, "WHAT IS ENERGY AND ENERGY CONSERVATION?" THE SECOND LESSON, COMMUNITY WORKERS WHO WORK DIRECTLY WITH THE SOURCES OF ENERGY, DISCUSSES FARMERS, GROCERS, FOOD PROCESSORS, OIL WORKERS, GAS STATION ATTENDANTS, AND METER READERS. THE THIRD LESSON IS ENTITLED COMMUNITY WORKERS WHOSE WORK DEPENDS ON A CONTINUAL SUPPLY OF ENERGY. THE FOURTH LESSON IS COMMUNITY WORKERS WHO MAKE DECISIONS ABOUT ENERGY. EACH LESSON CONTAINS COMPLETE TEACHER AND STUDENT MATERIALS, INCLUDING BACKGROUND READINGS, OBJECTIVES, TEACHING STRATEGIES, AND SUGGESTIONS FOR EXTENDING THE LEARNING OUTSIDE THE CLASSROOM. (BB)

REPORT NUMBER: EDM-1030

CONTRACT NUMBER: EX-76-C-10-3841

AVAILABILITY: U.S. DEPARTMENT OF ENERGY, TECHNICAL INFORMATION OFFICE, P.O. BOX 62, OAK RIDGE, TENNESSEE 37830 (NO PRICE QUOTED)

INSTITUTION NAME: NATIONAL SCIENCE TEACHERS ASSOCIATION, WASHINGTON, D.C.

SPONSORING AGENCY NAME: BUREAU OF INTERGOVERNMENTAL AND INSTITUTIONAL RELATIONS (DOE), WASHINGTON, D.C. OFFICE OF EDUCATION, BUSINESS AND LABOR AFFAIRS.

ACCESSION NUMBER: ED153846

CLEARINGHOUSE ACCESSION NUMBER: SE024172

PUBLICATION DATE: OCT 77

TITLE: INTERDISCIPLINARY STUDENT/TEACHER MATERIALS IN ENERGY, THE ENVIRONMENT, AND THE ECONOMY: 6, THE ENERGY WE USE, GRADE 1.

PERSONAL AUTHOR: BLOCH, LENORE; AND OTHERS

INSTITUTION CODE: PGK57300

SPONSORING AGENCY CODE: 88815531

DESCRIPTOR: *CURRICULUM GUIDES; ELEMENTARY EDUCATION; ELEMENTARY SCHOOL SCIENCE; *ENERGY; ENVIRONMENTAL EDUCATION; *GRADE 1; *LESSON PLANS; SCIENCE EDUCATION; *SCIENCE UNITS; UNIT PLAN

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$2.06 PLUS POSTAGE.

DESCRIPTIVE NOTE: 47P.; FOR RELATED DOCUMENTS, SEE SE 024 167-171 AND SE 024 218

ISSUE: RIESEP78

ABSTRACT: THIS INSTRUCTIONAL UNIT CONTAINS A SET OF NINE LESSONS ON ENERGY FOR GRADE ONE. EACH LESSON CONTAINS COMPLETE TEACHER AND STUDENT MATERIALS. READING SKILLS AND LANGUAGE EXPERIENCES ARE REINFORCED IN EACH ACTIVITY. THE LESSONS COVER SUCH TOPICS AS ENERGY FROM FOOD, ENERGY FROM THE SUN, FOSSIL FUELS, THE WIND, MOVING WATER, AND ENERGY CONSERVATION. THE CHILDREN EXAMINE THINGS SUCH AS CEREAL GRAINS TO LEARN ABOUT FOOD ENERGY, MAKE CLAY DINOSAURS TO GET SOME IDEA ABOUT THE FORMATION TIME OF COAL, OIL, AND NATURAL GAS, AND BECOME PART OF A PINWHEEL PARADE SHOWING THE ENERGY IN WIND. (BB)

REPORT NUMBER: EDM-1029

CONTRACT NUMBER: EX-76-C-10-3841

AVAILABILITY: U.S. DEPARTMENT OF ENERGY, TECHNICAL INFORMATION OFFICE, P.O. BOX 62, OAK RIDGE, TENNESSEE 37830 (NO PRICE QUOTED)

INSTITUTION NAME: NATIONAL SCIENCE TEACHERS ASSOCIATION, WASHINGTON, D.C.

SPONSORING AGENCY NAME: BUREAU OF INTERGOVERNMENTAL AND INSTITUTIONAL RELATIONS (DOE), WASHINGTON, D.C. OFFICE OF EDUCATION, BUSINESS AND LABOR AFFAIRS.

ACCESSION NUMBER: ED153859

CLEARINGHOUSE ACCESSION NUMBER: SE024218

PUBLICATION DATE: FEB 78

TITLE: INTERDISCIPLINARY STUDENT/TEACHER MATERIALS IN ENERGY, THE ENVIRONMENT, AND THE ECONOMY. NETWORKS: HOW ENERGY LINKS PEOPLE, GOODS AND SERVICES, GRADES 4, 5.

PERSONAL AUTHOR: JOHNSON, BETTE; SWINTON, OLIVIA

INSTITUTION CODE: FGK57300

SPONSORING AGENCY CODE: BBB15531

DESCRIPTOR: ELECTRICITY; *ELEMENTARY EDUCATION; *ENERGY; GRADE 4; GRADE 5; *INSTRUCTIONAL MATERIALS; INTEGRATED CURRICULUM; *SCIENCE EDUCATION; *SOCIAL STUDIES; *TEACHING GUIDES

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 107P.; FOR RELATED DOCUMENTS, SEE SE 024 167-172; NOT AVAILABLE IN HARD COPY DUE TO MARGINAL LEGIBILITY OF ORIGINAL DOCUMENT

ISSUE: RIESEP78

ABSTRACT: THE PURPOSE OF THIS UNIT IS TO INVESTIGATE A SIMPLE ENERGY NETWORK AND TO MAKE AN ANALOGY WITH SIMILAR MUTUALLY SUPPORTING NETWORKS IN THE NATURAL AND MAN-MADE WORLDS. THE LESSONS IN THIS UNIT DEVELOP THE NETWORK IDEA AROUND A SIMPLE ELECTRICAL DISTRIBUTION SYSTEM THAT WE DEPEND ON AND ALSO INTO FURTHER CONSIDERATION OF ELECTRICAL ENERGY ITSELF. THE NETWORK IDEA IN THE LATER LESSONS EMPHASIZES THE INTERDEPENDENCE OF THE MAN-MADE NETWORK FOR PRODUCING AND DISTRIBUTING ELECTRICAL ENERGY AND THE NATURAL ECOLOGICAL NETWORK. IN THE FINAL LESSON, THE CONSUMING END OF THE NETWORK IS EXAMINED AND SOME STRATEGIES FOR CONSUMING ELECTRICAL ENERGY ARE EXAMINED. STUDENTS SHOULD LEARN THAT ENERGY NETWORKS SUCH AS THE ELECTRICAL CIRCUITS ARE A NECESSARY PART OF MODERN LIFE. THEY ARE ALSO EXPECTED TO LEARN ABOUT SOURCES, CONVERSIONS, AND USES OF ELECTRICAL ENERGY. THERE ARE SIX LESSONS IN THIS FOURTH- AND FIFTH-GRADE UNIT. COMPLETE TEACHER AND STUDENT MATERIALS ARE PROVIDED. (BB)

REPORT NUMBER: HCP/U-3841-0005

CONTRACT NUMBER: EX-76-C-10-3841

AVAILABILITY: U.S. DEPARTMENT OF ENERGY, TECHNICAL INFORMATION OFFICE, P.O. BOX 62, OAK RIDGE, TENNESSEE 37830 (NO PRICE QUOTED)

INSTITUTION NAME: NATIONAL SCIENCE TEACHERS ASSOCIATION, WASHINGTON, D.C.

SPONSORING AGENCY NAME: BUREAU OF INTERGOVERNMENTAL AND INSTITUTIONAL RELATIONS (DOE), WASHINGTON, D.C. OFFICE OF EDUCATION, BUSINESS AND LABOR AFFAIRS.

ACCESSION NUMBER: ED153871

CLEARINGHOUSE ACCESSION NUMBER: SE024264

PUBLICATION DATE: 77

TITLE: ENERGY IN OUR SOCIETY.

INSTITUTION CODE: BBB15583

DESCRIPTOR: ACTIVITY UNITS; CURRICULUM ENRICHMENT; ENERGY; *ENERGY CONSERVATION; ENVIRONMENTAL EDUCATION; *INSTRUCTIONAL MATERIALS; *INTERDISCIPLINARY APPROACH; NATURAL RESOURCES; *SECONDARY EDUCATION; UNITS OF STUDY; PHILADELPHIA ELECTRIC COMPANY PA

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 73P.; FOR RELATED DOCUMENT, SEE SE 024 265

ISSUE: RIESEP78

ABSTRACT: THIS PUBLICATION IS A SERIES OF 13 ORIGINAL CLASSROOM INSTRUCTIONAL PACKETS AND AN ADDITIONAL 4 UNITS ADAPTED FROM NATIONAL SCIENCE TEACHERS ASSOCIATION UNITS. EACH PACKET IS DESIGNED TO SUPPLEMENT SPECIFIC EXISTING SUBJECT CURRICULA. UNITS HAVE BEEN DESIGNED FOR PHYSICS, CHEMISTRY, ENGLISH, MATHEMATICS, GENERAL SCIENCE AND STUDIES. PACKETS CONTAIN A TEACHERS' GUIDE AND CLASSROOM QUANTITIES OF INSTRUCTIONAL MATERIALS. THE MATERIALS REPRESENT EXISTING RESOURCES FROM A WIDE SPECTRUM OF ORGANIZATIONS, INSURING ADEQUATE BALANCE. TEACHER GUIDES ARE WRITTEN TO COVER 9 TO 10 CLASS PERIODS, CONTAIN SPECIFIC OBJECTIVES, AND SUGGESTED TEACHER PREPARATION AND CLASSROOM ACTIVITIES. THE UNITS ARE DESIGNED FOR USE WITH STUDENTS IN GRADES 1 THROUGH 12 AND ARE DESIGNED TO USE A VARIETY OF INSTRUCTIONAL MATERIALS AND TECHNIQUES SUCH AS FILMS, FIELD TRIPS, SIMULATIONS, QUESTIONING, WRITTEN EXERCISES, ETC. EXAMPLES OF UNIT TITLES ARE: GETTING STARTED--IS THERE AN ENERGY CRISIS?; FISSION, FUSION AND FISHIN; ENERGY EDUCATION AND THE ENVIRONMENT; AND HOW A BILL BECOMES A LAW. (AUTHOR/MR)

AVAILABILITY: ENERGY EDUCATION ADVISORY COUNCIL, PHILADELPHIA ELECTRIC CO., 2301 MARKET ST., P.O. BOX 8699, PHILADELPHIA, PA. 19101 (TEACHER GUIDES - SINGLE COPY - FREE; REQUEST PRICE ON QUANTITY ORDERS)

INSTITUTION NAME: PHILADELPHIA ELECTRIC CO., PA. ENERGY EDUCATION ADVISORY COUNCIL.

ACCESSION NUMBER: ED153872

CLEARINGHOUSE ACCESSION NUMBER: SE024265

PUBLICATION DATE: 77

TITLE: OUR WORLD OF ENERGY: AN INTERDISCIPLINARY CURRICULUM PROGRAM FOR ELEMENTARY SCHOOLS. TEACHER'S GUIDE, STUDENT MANUAL, 3 FILMSTRIPS, AND 3 AUDIO CASSETTE TAPES.

INSTITUTION CODE: BBB15583

DESCRIPTOR: ACTIVITY UNITS; *AUDIOVISUAL AIDS; CURRICULUM ENRICHMENT; *ELEMENTARY EDUCATION; ENERGY; *ENERGY CONSERVATION; ENVIRONMENTAL EDUCATION; *INSTRUCTIONAL MATERIALS; *INTERDISCIPLINARY APPROACH; SCIENCE ACTIVITIES; UNITS OF STUDY

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 185P.; FOR RELATED DOCUMENT, SEE SE 024 264

ISSUE: RIESEP78

ABSTRACT: THIS COLLECTION OF INSTRUCTIONAL MATERIALS FOR ENERGY EDUCATION IN THE ELEMENTARY CLASSROOM INCLUDES A TEACHER'S GUIDE, A STUDENT WORKBOOK, AND THREE FILMSTRIP/CASSETTE-TAPE PROGRAMS. THESE MATERIALS ARE DESIGNED TO INTRODUCE CHILDREN, IN AN INTERDISCIPLINARY FASHION, TO ENERGY ISSUES AND TO SHOW THEM WHAT ENERGY IS, WHERE IT COMES FROM, AND WHAT WE CAN DO ABOUT THE ENERGY CRISIS. THE STUDENT WORKBOOK CONTAINS LESSONS CENTERING ON A SPECIFIC TOPIC. EACH LESSON BEGINS WITH A SECTION THAT REVIEWS THE PREVIOUS ONE. EACH LESSON ENDS WITH VOCABULARY WORDS, BOTH SCIENTIFIC AND NON-SCIENTIFIC, THE STUDENT NEEDS TO KNOW TO UNDERSTAND THE LESSON. A SET OF ENERGY ACTIVITIES TO ENABLE THE STUDENT TO HAVE HANDS-ON LABORATORY EXPERIENCES TO CLARIFY CONCEPTS IS INCLUDED. THE TEACHER'S GUIDE CONTAINS THE LESSONS OF THE STUDENT WORKBOOK PLUS ANSWERS, TEACHING SUGGESTIONS AND OTHER HELPFUL INFORMATION. THESE MATERIALS ARE ORGANIZED INTO UNITS ENTITLED: (1) ENERGY - WHAT IS IT?; (2) ENERGY - WHERE DOES IT COME FROM?; AND (3) THE ENERGY CRISIS. THERE IS ONE FILMSTRIP PROGRAM FOR EACH UNIT. THE FILMSTRIP PROGRAMS REITERATE THE CONCEPTS OF THE UNITS. (MR)

AVAILABILITY: ENERGY EDUCATION ADVISORY COUNCIL, PHILADELPHIA ELECTRIC CO., 2301 MARKET ST., P.O. BOX 8699, PHILADELPHIA, PA. 19101 (TEACHER GUIDE $10.00; STUDENT GUIDE $1.00; REQUEST PRICE ON QUANTITY ORDERS)

INSTITUTION NAME: PHILADELPHIA ELECTRIC CO., PA. ENERGY EDUCATION ADVISORY COUNCIL.

ACCESSION NUMBER: ED153893

CLEARINGHOUSE ACCESSION NUMBER: SO010860

PUBLICATION DATE: 78

TITLE: THE TWENTY-NINTH DAY: ACCOMODATING HUMAN NEEDS AND NUMBERS TO THE EARTH'S RESOURCES.

PERSONAL AUTHOR: BROWN, LESTER R.

INSTITUTION CODE: BBB13108

DESCRIPTOR: BIRTH RATE; CLIMATE CONTROL; CLIMATIC FACTORS; CONSERVATION (ENVIRONMENT); DEATH; DEPLETED RESOURCES; *ECOLOGICAL FACTORS; *ECOLOGY; ECONOMIC DEVELOPMENT; *ECONOMIC FACTORS; ECONOMIC STATUS; ENERGY; ENERGY CONSERVATION; FIELD CROPS; FISHERIES; FOOD; FORESTRY; FUEL CONSUMPTION; FUTURES (OF SOCIETY); GLOBAL APPROACH; HEALTH CONDITIONS; INCOME; INFLATION (ECONOMICS); LAND USE; MARINE BIOLOGY; *NATURAL RESOURCES; PETROLEUM INDUSTRY; PHYSICAL ENVIRONMENT; POLITICAL INFLUENCES; POPULATION DISTRIBUTION; POPULATION GROWTH; POPULATION TRENDS; RECYCLING; SOCIAL CHANGE; SOCIAL INFLUENCES; *SOCIAL SYSTEMS; SOIL CONSERVATION; UNEMPLOYMENT; WATER RESOURCES; WORKING WOMEN

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 375P.

ISSUE: RIESEP78

ABSTRACT: THE PURPOSE OF THIS BOOK IS TO EXAMINE THE INTERACTION OF THE WORLD'S ECOLOGICAL, ECONOMIC, AND SOCIAL SYSTEMS. IT IS DIVIDED INTO 12 CHAPTERS, WITH THE FIRST CHAPTER PROVIDING AN INTRODUCTION AND OVERVIEW. CHAPTER TWO ASSESSES THE DIMENSIONS OF THE ECOLOGICAL STRESSES BEING PUT ON THE ENVIRONMENT, SPECIFICALLY, THE WORLD'S OCEANS, FORESTS, GRASSLANDS, AND CROPLANDS. CHAPTER THREE POINTS OUT SOME OF THE CONSEQUENCES OF THESE STRESSES. THE FOURTH CHAPTER CONSIDERS THE TRENDS AND DANGERS OF POPULATION GROWTH AND URGES POPULATION STABILIZATION. CHAPTER FIVE DISCUSSES THE ENERGY SITUATION AND THE TRANSITION FROM PETROLEUM TO NUCLEAR, COAL, SOLAR, AND OTHER ALTERNATIVE ENERGY SOURCES. CHAPTER SIX EXAMINES THE FOOD ECONOMY AND WHAT HAS AND CAN BE DONE TO EASE WORLD FOOD SHORTAGES. CHAPTER SEVEN STUDIES THE ECONOMIC STRESSES OF INFLATION, UNEMPLOYMENT, CAPITAL SCARCITY, LABOR PRODUCTION, AND THE SLOWING OF ECONOMIC GROWTH AROUND THE WORLD. THE EIGTH AND NINTH CHAPTERS DEAL WITH THE SOCIAL AND ECOLOGICAL SIGNIFICANCE OF THE DISTRIBUTION OF WEALTH BOTH AMONG AND WITHIN SOCIETIES. CHAPTER TEN DISCUSSES THE ACCOMMODATIONS TO THE EARTH'S NATURAL SYSTEMS AND RESOURCES THAT MUST TAKE PLACE. THE LAST TWO CHAPTERS CONCENTRATE ON HOW THESE ACCOMMODATIONS WILL BE ACCOMPLISHED, AND WHO WILL BE INVOLVED IN THE PROCESS. (AUTHOR/JK)

AVAILABILITY: W.W. NORTON AND COMPANY, 500 FIFTH AVENUE, NEW YORK, NEW YORK 10036 ($11.95 HARDBOUND, $3.95 PAPERBOUND)

INSTITUTION NAME: WORLDWATCH INST., WASHINGTON, D.C.

ACCESSION NUMBER: ED153938

CLEARINGHOUSE ACCESSION NUMBER: SO010890

PUBLICATION DATE: MAY 78

TITLE: THE GLOBAL ECONOMIC PROSPECT: NEW SOURCES OF ECONOMIC STRESS. WORLDWATCH PAPER 20.

PERSONAL AUTHOR: BROWN, LESTER R.

INSTITUTION CODE: BBB13108

DESCRIPTOR: AGRICULTURAL PRODUCTION; *BIOLOGICAL INFLUENCES; CAPITALISM; CHANGING ATTITUDES; *DEPLETED RESOURCES; *ECONOMIC CLIMATE; *ECONOMIC FACTORS; ECONOMIC PROGRESS; ENERGY; ENERGY CONSERVATION; FOOD; *GLOBAL APPROACH; GRAPHS; INFLATION (ECONOMICS); NATURAL RESOURCES; POLICY FORMATION; PRODUCTIVITY; *QUALITY OF LIFE; SOCIAL PROBLEMS; TABLES (DATA); UNEMPLOYMENT

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 57P.

ISSUE: RIESEP78

ABSTRACT: AMERICAN ECONOMIC ANALYSTS WILL BETTER UNDERSTAND CURRENT ECONOMIC TRENDS IF THEY INVESTIGATE ECONOMIC PROBLEMS IN LIGHT OF THE EXPANDING GLOBAL ECONOMY. REASONS FOR THE FAILURE OF ECONOMISTS TO EXPLAIN THE SIMULTANEOUS EXISTENCE OF RAPID INFLATION AND HIGH UNEMPLOYMENT INCLUDE PREOCCUPATION WITH ECONOMIC INDICATORS, SHORT-TERM FORECASTS, AND ECONOMETRIC MODELS. INSTEAD OF CONCENTRATING ON SYMPTOMS OF ECONOMIC MALADIES, ECONOMISTS SHOULD CONSIDER THEIR UNDERLYING CAUSES SUCH AS THE ROLE OF BIOLOGICAL SYSTEMS IN THE ECONOMY. THE FOUR MAJOR BIOLOGICAL SYSTEMS--FISHERIES, FORESTS, GRASSLANDS, AND CROPLANDS--FORM THE FOUNDATION OF THE GLOBAL ECONOMIC SYSTEM. ECONOMISTS' GENERAL LACK OF ECOLOGICAL AWARENESS HAS CAUSED THEM TO IGNORE THE ECONOMIC IMPACT OF PRACTICES SUCH AS OVERGRAZING, DEFORESTATION, RAPID POPULATION GROWTH, CONVERSION OF GRASSLANDS INTO CROPLANDS, ENCROACHMENT OF CITIES AND USERTS ON CROPLANDS, DEPLETION OF NONRENEWABLE ENERGY SOURCES, UNEMPLOYMENT, CAPITAL SCARCITY, DIMINISHING RETURNS, AND RISING REAL COSTS ACCOMPANIED BY INFLATIONARY PRESSURES. MANY CURRENT ECONOMIC PROBLEMS ARE ROOTED IN THE DETERIORATING RELATIONSHIP BETWEEN THE WORLD'S FOUR BILLION INHABITANTS AND THE EARTH'S NATURAL SYSTEMS AND RESOURCES. ECONOMISTS SHOULD REALIZE THAT MANY ECONOMIC PROBLEMS STEM FROM THE DEPENDENCE OF THE ECONOMIC SYSTEM UPON THE NATURAL ENVIRONMENT. (AUTHOR/DB)

AVAILABILITY: WORLDWATCH INSTITUTE, 1776 MASSACHUSETTS AVENUE, N.W., WASHINGTON, D.C. 20036 ($2.00, PAPER COVER)

INSTITUTION NAME: WORLDWATCH INST., WASHINGTON, D.C.

ACCESSION NUMBER: ED154326

CLEARINGHOUSE ACCESSION NUMBER: CG012646

PUBLICATION DATE: 18 MAR 77

TITLE: CONFERENCE PROCEEDINGS: OPTIONS FOR FAMILIES IN THE FACE OF ADVERSITY.

INSTITUTION CODE: BBB13949

DESCRIPTOR: CONFERENCE REPORTS; *ENERGY CONSERVATION; *FAMILY (SOCIOLOGICAL UNIT); *FAMILY PROBLEMS; *LEGISLATION; RESEARCH UTILIZATION; *SOCIAL FACTORS; *STATEWIDE PLANNING; UNEMPLOYMENT

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$4.67 PLUS POSTAGE.

DESCRIPTIVE NOTE: 88P.

ISSUE: RIEOCT78

ABSTRACT: THIS DOCUMENT IS THE PROCEEDINGS OF A STATEWIDE CONFERENCE ON THE FAMILY SPONSORED BY THE FAMILY STUDY CENTER AND THE OFFICE OF UNIVERSITY EXTENSION, OKLAHOMA STATE UNIVERSITY. PARTICIPANTS AND RESOURCE PERSONS FROM EIGHT STATES AND 39 COMMUNITIES CAME TOGETHER TO CONSIDER NEW OPTIONS FOR FAMILIES AS THEY FACE THE ADVERSITIES OF A WORLD WITH A CHANGING RESOURCE BASE. AN INTERRELATED SET OF TOPICS WAS CONSIDERED THROUGH A FORMAT OF GENERAL SESSIONS INTERWOVEN WITH SMALLER PANEL DISCUSSIONS. STARTING WITH THE INSIGHTS OF FAMILY ECONOMIST GORDON BIVENS, THE CONFERENCE EXPLORED THE MAJOR UNPAID CONTRIBUTIONS OF GOODS AND SERVICES THAT FAMILY MEMBERS MAKE TO EACH OTHER. BIVENS FOCUSSED ON THE MEANING OF CHANGE IN THE GRANTS ECONOMY OF THE HOUSEHOLD IN TERMS OF COSTS TO HUMAN DEVELOPMENT AND THE MARKET ECONOMY. OTHER PRESENTATIONS DEALT WITH THE RELATIONSHIPS BETWEEN PERCEIVED QUALITY OF LIFE AND MARITAL STATUS, FERTILITY PATTERNS AND EMPLOYMENT; THE EFFECTS OF UNEMPLOYMENT ON FAMILY LIFE; THE PROCESS OF FORMULATING GOVERNMENT POLICY AFFECTING FAMILIES; AND THE IMPORTANCE OF FAMILY ENERGY CONSERVATION. CONCURRENT PANEL SESSIONS SUPPLEMENTED EACH MAJOR PRESENTATION. (AUTHOR)

INSTITUTION NAME: OKLAHOMA STATE UNIV., STILLWATER. DIV. OF HOME ECONOMICS.

ACCESSION NUMBER: ED154507

CLEARINGHOUSE ACCESSION NUMBER: EA010607

PUBLICATION DATE: 31 MAR 77

TITLE: LOW ENERGY UTILIZATION SCHOOL ENERGY CONSERVATION OPERATION MANUAL. PHASE 2: REPORT.

PERSONAL AUTHOR: STEIN, RICHARD G.; AND OTHERS

INSTITUTION CODE: BBB15635

SPONSORING AGENCY CODE: BBB10350

DESCRIPTOR: *BUILDING OPERATION; *EFFICIENCY; ELEMENTARY SECONDARY EDUCATION; *ENERGY CONSERVATION; HEATING; ILLUMINATION LEVELS; LIGHTING; SCHEDULING; SCHOOL MAINTENANCE; *STANDARDS; VENTILATION; NEW YORK (NEW YORK)

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 87P.; NOT AVAILABLE IN PAPER COPY DUE TO GRAY PAPER USED IN HALF THE DOCUMENT

ISSUE: RIEOCT78

ABSTRACT: THE PURPOSE OF THIS MANUAL IS TO CONSOLIDATE INTO A SINGLE DOCUMENT ALL THE MAINTENANCE AND OPERATIONAL STEPS THAT, WHEN IMPLEMENTED, WILL RESULT IN THE LOWEST ENERGY USE CONSISTENT WITH SCHOOL EDUCATIONAL PROGRAMS. THE MANUAL DESCRIBES PROCEDURES FOR KEEPING THE BUILDING AND ITS EQUIPMENT WELL MAINTAINED AND EFFICIENTLY RUN, ESTABLISHING REALISTIC STANDARDS FOR THE ENERGY REQUIREMENTS FOR THE VARIOUS ACTIVITIES IN THE SCHOOL AND ADJUSTING THE EQUIPMENT TO PROVIDE NO MORE THAN THESE STANDARDS, AND SCHEDULING SO THAT ELECTRICITY AND FUEL ARE USED ONLY WHERE AND WHEN NEEDED. AN APPENDIX AT THE END OF THE MANUAL CONTAINS SUPPLEMENTARY INFORMATION, INCLUDING A CHART FOR TROUBLESHOOTING THE HEATING PLANT; INSTRUCTIONS FOR THE EVALUATION AND MODIFICATION OF EXISTING SYSTEMS, SCHEDULES, TABLES AND RECORD BLANKS TO BE USED IN CONNECTION WITH THE VARIOUS PROCEDURES, AND SOME OTHER BACKGROUND INFORMATION. (AUTHOR/MLF)

REPORT NUMBER: NSF/RA-770033

GRANT NUMBER: AER-73-0357-A02

INSTITUTION NAME: NEW YORK CITY BOARD OF EDUCATION, N.Y.

SPONSORING AGENCY NAME: NATIONAL SCIENCE FOUNDATION, WASHINGTON, D.C. RANN PROGRAM.

ACCESSION NUMBER: ED154996

CLEARINGHOUSE ACCESSION NUMBER: SE024209

PUBLICATION DATE: 78

TITLE: ENERGY AND EDUCATION: TEACHING ALTERNATIVES.

PERSONAL AUTHOR: POSTHUMA, FREDRICK E., ED.

INSTITUTION CODE: PGK36700

DESCRIPTOR: ACTIVITY UNITS; *CONSERVATION EDUCATION; ENERGY; *ENERGY CONSERVATION; *ENVIRONMENTAL EDUCATION; *EXPERIENTIAL LEARNING; INTERDISCIPLINARY APPROACH; LESSON PLANS; NATURAL RESOURCES; *SCIENCE ACTIVITIES; SIMULATION; *ENERGY EDUCATION; NATIONAL EDUCATION ASSOCIATION

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 142P.; NOT AVAILABLE IN HARD COPY DUE TO COPYRIGHT RESTRICTIONS

ISSUE: RIEOCT78

ABSTRACT: THIS PUBLICATION IS A COLLECTION OF ENERGY EDUCATION ARTICLES FOR THE CLASSROOM TEACHER. MOST OF THESE ARTICLES SUGGEST ENERGY EDUCATION ACTIVITIES AND PROJECTS THAT MAY BE USED AS IS OR MODIFIED TO FIT CLASSROOM CONDITIONS. TWO ENERGY MINI-UNITS ARE INCLUDED AS WELL AS A COLLECTION OF ENERGY LESSON PLANS. CONTENTS INCLUDE: (1) TEACHING ABOUT THE NUCLEAR POWER CONTROVERSY BY SIMULATION; (2) OUR SCHOOL-MADE SOLAR PROJECT; (3) SIX WAYS TO REDUCE ENERGY CONSUMPTION; (4) LEISURE AND THE ENERGY CRISIS; (5) SOME GUIDELINES FOR ENERGY PROGRAMS; (6) ENERGY TEACHING CENTERS; (7) WHICH SOURCE OF ENERGY IS BEST FOR HEATING MY COMMUNITY?; (8) ENERGY AND ITS NATURAL SOURCES; AND (9) ENERGY RESOURCE LIST. MANY OF THE ARTICLES ALSO INCLUDE STUDENT OR TEACHER RESOURCE LISTS AS WELL AS ACTIVITY SUGGESTIONS AND INFORMATIVE TEXTS. A RATIONALE FOR ENERGY EDUCATION IS PRESENTED IN THE FIRST ARTICLE. BRIEF DESCRIPTIONS OF EACH ARTICLE ARE ALSO INCLUDED. (CS)

AVAILABILITY: NATIONAL EDUCATION ASSOCIATION, 1201 SIXTEENTH ST., N.W., WASHINGTON, D.C. 20036 (STOCK NO., PAPER 1492-8-00, NO PRICE QUOTED)

INSTITUTION NAME: NATIONAL EDUCATION ASSOCIATION, WASHINGTON, D.C.

ACCESSION NUMBER: ED154999

CLEARINGHOUSE ACCESSION NUMBER: SE024223

PUBLICATION DATE: APR 77

TITLE: ENERGY ACTIVITIES FOR JUNIOR HIGH SCIENCE.

PERSONAL AUTHOR: BEAVER, DAVID; AND OTHERS

INSTITUTION CODE: BBB15410; NSO52650

DESCRIPTOR: COGNITIVE PROCESSES; ENERGY; *ENERGY CONSERVATION; *ENVIRONMENTAL EDUCATION; *INQUIRY TRAINING; *JUNIOR HIGH SCHOOL STUDENTS; *SCIENCE ACTIVITIES; SCIENCE EDUCATION; SECONDARY EDUCATION; SKILL DEVELOPMENT

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 24P.; NOT AVAILABLE IN HARD COPY DUE TO COLORED PAGES THROUGHOUT ENTIRE DOCUMENT

ISSUE: RIEOCT78

ABSTRACT: THIS DOCUMENT IS A COLLECTION OF SIX ENERGY EDUCATION ACTIVITIES FOR JUNIOR HIGH SCHOOL SCIENCE. ITS PURPOSE IS TO HELP PROMOTE KNOWLEDGE ABOUT ENERGY, PROVIDE LABORATORY EXPERIENCES, PROVOKE INQUIRY, AND RELATE ENERGY TO SOCIETY THROUGH THE SCIENCE CURRICULUM. THE SIX ACTIVITIES ARE DESIGNED TO TAKE ONE TO THREE CLASS PERIODS. TWO OF THE ACTIVITIES HAVE ACTIVITY OPTIONS INCLUDED. EACH ACTIVITY PROVIDES SOME BACKGROUND INFORMATION, AN ACTIVITY DESCRIPTION INCLUDING A MATERIALS LIST, EVALUATION QUESTIONS, AND A RESOURCES LIST. SEVERAL ACTIVITIES ALSO INCLUDE STUDENT WORKSHEETS. ACTIVITY TITLES ARE: (1) STAR POWER; (2) ENERGY: WHAT'S IT?; (3) RUBE'S INNOVATION; (4) KILLERWATTS; (5) SCAVENGING ENERGY; AND (6) WHAT IF...? THE SKILLS THAT THE ACTIVITIES ARE INTENDED TO TEACH INCLUDE HYPOTHESIS FORMATION, COLLECTING AND ANALYZING DATA, OBSERVATION AND INFERENCE, DECISION MAKING, CHART AND TABLE READING, AND THE APPLICATION OF SCIENCE TO OTHER AREAS OF LIFE. (MR)

INSTITUTION NAME: MINNESOTA STATE DEPT. OF EDUCATION, ST. PAUL.; MINNESOTA STATE ENERGY AGENCY, ST. PAUL.

ACCESSION NUMBER: ED155012

CLEARINGHOUSE ACCESSION NUMBER: SE024259

PUBLICATION DATE: 77

TITLE: TOPICS AND TERMS IN ENVIRONMENTAL PROBLEMS.

PERSONAL AUTHOR: HOLUM, JOHN R.

DESCRIPTOR: CONSERVATION (ENVIRONMENT); ECOLOGY; *ENERGY;

*ENVIRONMENT; *GLOSSARIES; *NATURAL RESOURCES; PESTICIDES; POLLUTION; *REFERENCE BOOKS; *WORLD PROBLEMS

EDRS PRICE: DOCUMENT NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 729P.; PAPER PRESENTED AT THE ANNUAL MEETING OF THE AMERICAN EDUCATIONAL RESEARCH ASSOCIATION (TORONTO, CANADA, MARCH 27-31, 1978)

ISSUE: RIEOCT78

ABSTRACT: THIS REFERENCE IS AN EXPANDED GLOSSARY OF TOPICS AND TERMS CURRENTLY RELATED TO ENVIRONMENTAL PROBLEMS. THESE TOPICS AND TERMS ARE ASSOCIATED WITH ENERGY, AIR POLLUTION, WATER POLLUTION, WASTES, AND PESTICIDES. INCLUDED ARE 239 MAIN ENTRIES RANGING FROM ACARICIDE TO WEATHERING. EACH ENTRY BRIEFLY DESCRIBES THE TOPIC OR TERM AND OFTEN PRESENTS A DISCUSSION OF THE RELATED ISSUES. IN THESE DISCUSSIONS, AN ATTEMPT IS MADE TO PRESENT THE DIFFERENT VIEWS WHERE CONTROVERSY EXISTS. (MR)

AVAILABILITY: JOHN WILEY & SONS, INC., 605 THIRD AVENUE, NEW YORK, NEW YORK 10016 ($24.00)

ACCESSION NUMBER: ED155018

CLEARINGHOUSE ACCESSION NUMBER: SE024470

PUBLICATION DATE: 77

TITLE: A SURVEY OF PRECOLLEGE ENERGY EDUCATION CURRICULA AT THE STATE LEVEL.

PERSONAL AUTHOR: JONES, ROBERT M.; STEINBRINK, JOHN E.

INSTITUTION CODE: BBB13018

DESCRIPTOR: CURRICULUM; CURRICULUM GUIDES; ELEMENTARY SCHOOL SCIENCE; *ENERGY; ENERGY CONSERVATION; *ENVIRONMENTAL EDUCATION; *INSTRUCTIONAL MATERIALS; *SCIENCE EDUCATION; SECONDARY SCHOOL SCIENCE; *STATE DEPARTMENTS OF EDUCATION; *SURVEYS

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$2.06 PLUS POSTAGE.

DESCRIPTIVE NOTE: 40P.

ISSUE: RIEOCT78

ABSTRACT: THIS PUBLICATION INCLUDES A SURVEY AND DESCRIPTIONS OF SELECTED STATE ENERGY EDUCATION CURRICULUM MATERIALS. THE BASIC TASKS OF THE SURVEY WERE TO DETERMINE: (1) IF STATES HAD SYSTEMATIC ENERGY EDUCATION PROGRAMS FOR THEIR ELEMENTARY AND SECONDARY SCHOOLS, AND (2) IF EXISTING CURRICULUM MATERIALS MET NATIONAL NEEDS. AN INSTRUMENT TO EVALUATE ENERGY EDUCATION MATERIALS WAS DEVELOPED AND USED. A TELEPHONE SURVEY WAS MADE OF STATE SCIENCE CURRICULUM COORDINATORS WHO DID NOT REPLY TO A MAIL SURVEY. GENERALIZATIONS MADE FROM SURVEY DATA INCLUDE: (1) ENERGY EDUCATION MATERIALS TEND TO STRESS TECHNICAL TOPICS; (2) THEY OFTEN LACK CONSISTANT CORE THEMES AND ADEQUATE CONCEPTUAL FRAMEWORKS; AND (3) THEY PROVIDE LITTLE THAT IS USEFUL IN DEVELOPING AN ALTERNATIVE ENERGY ETHIC. FOUR PRIMARY AND FIVE MORE SPECIFIC SECONDARY RECOMMENDATIONS BASED ON SURVEY DATA AND PROJECT INVOLVEMENT IN ENERGY EDUCATION ARE GIVEN. THE ENERGY CURRICULUM MATERIALS OF TWENTY SELECTED STATES ARE DESCRIBED AND PROCUREMENT INFORMATION IS INCLUDED. (MR)

INSTITUTION NAME: HOUSTON UNIV., TEX. CLEAR LAKE CITY BRANCH.

ACCESSION NUMBER: ED155048

CLEARINGHOUSE ACCESSION NUMBER: SE024327

PUBLICATION DATE: 75

TITLE: ENERGY IN AGRICULTURE: PROCEEDINGS OF A CONFERENCE-WORKSHOP, ATLANTA, GEORGIA, OCTOBER 1-3, 1975.

INSTITUTION CODE: IEE01377

DESCRIPTOR: AGRICULTURAL EDUCATION; *AGRICULTURAL PRODUCTION; *AGRICULTURAL TRENDS; ANIMAL SCIENCE; *CONFERENCE REPORTS; *EDUCATIONAL NEEDS; *ENERGY; FOOD SERVICE INDUSTRY; RESEARCH; WORKSHOPS

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 118P.; NOT AVAILABLE IN HARD COPY DUE TO SMALL PRINT THROUGHOUT ENTIRE DOCUMENT

ISSUE: RIEOCT78

ABSTRACT: THIS PUBLICATION IS THE PROCEEDINGS OF A CONFERENCE-WORKSHOP HELD IN ATLANTA, GEORGIA IN OCTOBER 1975. AT THIS CONFERENCE 13 PAPERS WERE PRESENTED ON VARIOUS ASPECTS OF ENERGY USE IN AGRICULTURE. ALSO INCLUDED ARE THE FINAL REPORTS OF THE EXTENSION, THE TEACHING, AND THE RESEARCH WORKSHOP GROUPS. TITLE OF PAPERS INCLUDE ENERGY IN AGRICULTURE AND FOOD, ENERGY USE IN CROP SYSTEMS, ENERGY UTILIZATION IN PEST MANAGEMENT, USING SOLAR ENERGY IN AGRICULTURE, AND ENERGY AND THE U.S. FOOD SYSTEM. PAPERS DISCUSS SUCH TOPICS AS AGRICULTURAL POLICY, ENERGY EFFICIENCY IN AGRICULTURE, ENERGY CONSERVATION TECHNIQUES, ENERGY REQUIREMENTS FOR FERTILIZER PRODUCTION AND DISTRIBUTION, ALTERNATIVE ENERGY SOURCES FOR AGRICULTURE, AND ENERGY CONSERVATION IN FOOD PROCESSING INDUSTRIES. WORKSHOP GROUP REPORTS IDENTIFY AREAS OF EXTENSION WORK, EDUCATION, AND RESEARCH THAT ARE IN NEED OF INCREASED EMPHASIS OR THAT WOULD YIELD BETTER ENERGY CONSERVATION RESULTS. (MR)

INSTITUTION NAME: SOUTHERN REGIONAL EDUCATION BOARD, ATLANTA, GA.

ACCESSION NUMBER: ED155066

CLEARINGHOUSE ACCESSION NUMBER: SE024388

PUBLICATION DATE: 77

TITLE: CRITERIA FOR EFFECTIVE ENERGY EDUCATION.

PERSONAL AUTHOR: CHAMPAGNE, AUDREY B.; KLOPFER, LEO E.

INSTITUTION CODE: SYN73275

SPONSORING AGENCY CODE: BBB06621

DESCRIPTOR: CRITERIA; *CURRICULUM DESIGN; *CURRICULUM EVALUATION; EDUCATIONAL ECONOMICS; EDUCATIONAL RESEARCH; *ENERGY; *INSTRUCTIONAL MATERIALS; *MEDIA SELECTION; MODELS; PROGRAM BUDGETING; SCIENCE EDUCATION

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 89P.; NOT AVAILABLE IN HARD COPY DUE TO MARGINAL LEGIBILITY OF ORIGINAL DOCUMENT

ISSUE: RIEOCT78

ABSTRACT: THIS PAPER OUTLINES A PROCESS THAT CAN BE APPLIED TO THE ANALYSIS OR DESIGN OF INSTRUCTIONAL PROGRAMS AND MATERIALS. THE ROLE OF VALUES IN DECISION-MAKING IS DISCUSSED, WITH SPECIAL EMPHASIS ON DECISIONS CONCERNING ENERGY EDUCATION. IN ADDITION, SOME CRITERIA ARE GIVEN FOR EFFECTIVE PROGRAMS AND INSTRUCTIONAL MATERIALS FOR ENERGY EDUCATION. THIS PAPER ADDRESSES THE NEEDS OF THREE KINDS OF DECISION-MAKERS: (1) PURCHASERS OF INSTRUCTIONAL MATERIALS AND PROGRAMS; (2) PERSONS RESPONSIBLE FOR ALLOCATING FUNDS; AND (3) DESIGNERS OF MATERIALS AND PROGRAMS. EXTENSIVE LISTS OF QUESTIONS, COMPRISING A MAJOR PORTION OF THIS PAPER, REPRESENT THE MEANS BY WHICH THE ANALYZER CAN GLEAN APPROPRIATE INFORMATION FROM INSTRUCTIONAL MATERIAL AND BY WHICH THE DESIGNER AND THE FUNDER CAN CHECK TO SEE THAT SPECIFICATIONS FOR PROPOSED MATERIALS ARE COMPLETE. AN INSTRUCTIONAL UNIT ON ENERGY FOR ELEMENTARY SCHOOLS IS INCLUDED AS AN EXAMPLE OF THE APPLICATION OF SOME OF THE PRINCIPLES DISCUSSED. (AUTHOR/BB)

REPORT NUMBER: LRDC-1977/18

INSTITUTION NAME: PITTSBURGH UNIV., PA. LEARNING RESEARCH AND DEVELOPMENT CENTER.

SPONSORING AGENCY NAME: NATIONAL INST. OF EDUCATION (DHEW), WASHINGTON, D.C.

ACCESSION NUMBER: ED155758

CLEARINGHOUSE ACCESSION NUMBER: CS502143

PUBLICATION DATE: APR 78

TITLE: ERIC FIRST ANALYSIS: 1978-79 NATIONAL HIGH SCHOOL DEBATE RESOLUTIONS (WHAT SHOULD BE THE ENERGY POLICY OF THE UNITED STATES?)

PERSONAL AUTHOR: HENDERSON, BILL

INSTITUTION CODE: BBB06849; BBB12175

SPONSORING AGENCY CODE: BBB06621

DESCRIPTOR: *DEBATE; *ENERGY CONSERVATION; *FEDERAL REGULATION; *GUIDELINES; *PERSUASIVE DISCOURSE; POLITICAL ISSUES; PUBLIC SPEAKING; *RESEARCH TOOLS; SECONDARY EDUCATION; SPEECH COMMUNICATION; INFORMATION ANALYSIS PRODUCT; *NATIONAL HIGH SCHOOL DEBATE RESOLUTIONS (1978 79)

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$4.67 PLUS POSTAGE.

DESCRIPTIVE NOTE: 79P.; TABLES MAY BE MARGINALLY LEGIBLE DUE TO SMALL TYPE

ISSUE: RIENOV78

ABSTRACT: INTENDED FOR USE BY HIGH SCHOOL DEBATERS AND THEIR TEACHERS, THIS BOOK PROVIDES GUIDELINES FOR RESEARCH ON THE DEBATE TOPIC FOR THE 1978-1979 SCHOOL YEAR: "WHAT SHOULD BE THE ENERGY POLICY OF THE UNITED STATES?" THE FIRST SECTION IS DESIGNED TO BROADEN THE STUDENT'S COMPREHENSION OF THE DEBATING PROCESS BY FOCUSING ON THE MEANING OF THE ENERGY PROBLEM, STRESSING THE IMPORTANCE OF BEING PROBLEMATICAL, AND DEFINING THE TERMS INVOLVED IN THREE RESOLUTIONS GENERATED ON THE DEBATE TOPIC. OVER HALF OF THE BOOK DISCUSSES THE ENERGY PROBLEM IN THE WORLD TODAY AND PRESENTS 14 TABLES OF INFORMATION ON THE SUBJECT SUCH AS: UNITED STATES GROSS ENERGY INPUT BY SOURCE; THE FRAMEWORK OF THE ENERGY DEPARTMENT; THE WORLD PRODUCTION OF CRUDE PETROLEUM; UNITED STATES FUEL PRODUCTION AND CONSUMPTION, AND NUCLEAR AND SOLAR POWER. A SELECTED BIBLIOGRAPHY OF PERTINENT BOOKS, PERIODICALS, LAW JOURNALS, AND GOVERNMENT DOCUMENTS IS APPENDED. (MAI)

CONTRACT NUMBER: 400-75-0029

AVAILABILITY: SPEECH COMMUNICATION ASSOCIATION, 5205 LEESBURG PIKE, FALLS CHURCH, VIRGINIA 22041 ($1.50)

INSTITUTION NAME: ERIC CLEARINGHOUSE ON READING AND COMMUNICATION SKILLS, URBANA, ILL.; SPEECH COMMUNICATION ASSOCIATION, FALLS CHURCH, VA.

SPONSORING AGENCY NAME: NATIONAL INST. OF EDUCATION (DHEW), WASHINGTON, D.C.

ACCESSION NUMBER: ED156429

CLEARINGHOUSE ACCESSION NUMBER: SE024275

PUBLICATION DATE: 77

TITLE: EDUCATION CONFRONTS THE ENERGY DILEMMA. PROCEEDINGS OF THE ANNUAL CONFERENCE OF THE COUNCIL FOR EDUCATIONAL DEVELOPMENT AND RESEARCH (6TH, WASHINGTON, D.C. JUNE 22-24, 1977).

INSTITUTION CODE: 88810294

SPONSORING AGENCY CODE: 88815419

DESCRIPTOR: *CONFERENCE REPORTS; *ENERGY; *ENERGY CONSERVATION; *ENVIRONMENT; *FUTURES (OF SOCIETY); GOVERNMENT ROLE; *SCHOOL ROLE; SPEECHES; TEACHER ROLE; WORLD PROBLEMS

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$15.39 PLUS POSTAGE.

DESCRIPTIVE NOTE: 289P.; CONTAINS SMALL PRINT IN TABLES AND FIGURES

ISSUE: RIENOV78

ABSTRACT: IN JUNE OF 1977, THE COUNCIL FOR EDUCATIONAL DEVELOPMENT AND RESEARCH HELD ITS SIXTH ANNUAL CONFERENCE TO EXAMINE AND DISCUSS THE ROLE OF EDUCATION IN THE ENERGY DILEMMA. THIS PUBLICATION CONTAINS THE PROCEEDINGS OF THAT CONFERENCE. THE 300 CONFERENCE PARTICIPANTS HEARD ADDRESSES AND PANEL DISCUSSIONS WHICH EXAMINED NEARLY THE WHOLE ENERGY EDUCATION TASK. SPEECHES OR DISCUSSIONS FROM EACH OF THE 13 SESSIONS ARE PRESENTED IN THIS PUBLICATION. TITLES, AS AN INDICATOR OF CONTENT, INCLUDE: (1) THE ENERGY AGENDA AT THE OFFICE OF EDUCATION; (2) ENERGY RESOURCES: SCENARIOS FOR THE FUTURE; (3) THE MORAL DILEMMA OF ENERGY EDUCATION; (4) CONSTRAINTS INFLUENCING EDUCATION'S ROLE; (5) POLITICS OF ENERGY EDUCATION; (6) CONFRONTING THE ENERGY DILEMMA; (7) THE MEANING OF SCARCITY; (8) THE IMPACT OF THE CARTER ENERGY PROGRAM ON AMERICAN SCHOOLS; AND (9) REACTIONS TO THE CONFERENCE. IN GENERAL, IT WAS PERCEIVED THAT THE PRESSING ENERGY PROBLEMS OF TODAY MAY DRAMATICALLY ALTER THE VALUES AND LIFE STYLES OF FUTURE AMERICANS AND THAT NOT ONLY DOES EDUCATION NEED TO PREPARE PEOPLE FOR COPING WITH THE ENERGY PROBLEMS, BUT ALSO WITH THE PROBABLE SOCIAL CHANGES RESULTING FROM THOSE PROBLEMS. (MR)

CONTRACT NUMBER: EX-76-X-10-9377

GRANT NUMBER: EX-77-G-01-60006

AVAILABILITY: U.S. DEPARTMENT OF ENERGY, TECHNICAL INFORMATION OFFICE, P.O. BOX 62, OAK RIDGE, TENNESSEE 37830 (NO PRICE QUOTED)

INSTITUTION NAME: COUNCIL FOR EDUCATIONAL DEVELOPMENT AND RESEARCH, WASHINGTON, D.C.

SPONSORING AGENCY NAME: DEPARTMENT OF ENERGY, WASHINGTON, D.C.

ACCESSION NUMBER: ED156453

CLEARINGHOUSE ACCESSION NUMBER: SE024368

PUBLICATION DATE: AUG 75

TITLE: A SURVEY OF PUBLIC AND LEADERSHIP ATTITUDES TOWARD NUCLEAR POWER DEVELOPMENT IN THE UNITED STATES. STUDY NO. 2515.

INSTITUTION CODE: OPX30522

SPONSORING AGENCY CODE: 88815709

DESCRIPTOR: *ATTITUDES; ECONOMICS; ENERGY; *ENERGY CONSERVATION; ENVIRONMENTAL EDUCATION; *NATIONAL SURVEYS; NATURAL RESOURCES; POLITICS; POLLUTION; *PUBLIC OPINION; *SURVEYS; *UTILITIES; WASTE DISPOSAL; *NUCLEAR POWER

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$7.35 PLUS POSTAGE.

DESCRIPTIVE NOTE: 150P.; FOR RELATED DOCUMENT, SEE SE 024 369

ISSUE: RIENOV78

ABSTRACT: THIS PUBLICATION DETAILS A STUDY DONE BY LOUIS HARRIS AND ASSOCIATES IN 1975 TO ASSESS ATTITUDES TOWARD NUCLEAR POWER IN THE UNITED STATES. THE SURVEY CONSISTED OF THREE PARTS. THE FIRST PART WAS IN-PERSON, DOOR-TO-DOOR INTERVIEWS WITH 1,537 SCIENTIFICALLY SELECTED HOUSEHOLDS NATIONWIDE. THE SECOND PART WAS 301 PERSONAL INTERVIEWS, ABOUT 1 HOUR LONG, WITH NEIGHBORS OF NUCLEAR POWER PLANTS IN THREE AREAS OF THE COUNTRY. THE THIRD PART WAS PERSONAL INTERVIEWS WITH 201 POLITICAL, BUSINESS, ENVIRONMENTAL AND REGULATORY AGENCY LEADERS IN THE NATION. INTERVIEW QUESTIONS AND DATA; DISCUSSIONS OF EACH SECTION OF THE STUDY, AND A GENERAL SUMMARY ARE INCLUDED. SOME OF THE TOPICS EXAMINED ARE THE ADVANTAGES AND DISADVANTAGES OF NUCLEAR ENERGY; WASTE DISPOSAL, POLLUTION PROBLEMS; SAFETY; AND ECONOMICS OF NUCLEAR POWER. ATTITUDES TOWARD INCREASING NUMBERS OF NUCLEAR POWER PLANTS, CONFIDENCE IN UTILITY COMPANY MANAGEMENT AND IN ENVIRONMENTALISTS, TRUST IN THE NEWS MEDIA, AND FINANCING NUCLEAR DEVELOPMENT WERE ALSO SURVEYED. IT SHOULD BE NOTED THAT THIS STUDY PREDATES THE NATURAL GAS AND COAL SHORTAGES OF 1976-78. (MR)

INSTITUTION NAME: HARRIS (LOUIS) AND ASSOCIATES, INC., NEW YORK, N.Y.

SPONSORING AGENCY NAME: EBASCO SERVICES INC., NEW YORK, N.Y.

ACCESSION NUMBER: ED156454

CLEARINGHOUSE ACCESSION NUMBER: SE024369

PUBLICATION DATE: NOV 76

TITLE: SURVEY II OF PUBLIC AND LEADERSHIP ATTITUDES TOWARD NUCLEAR POWER DEVELOPMENT IN THE UNITED STATES. STUDY NO. 2628.

INSTITUTION CODE: OPX30522

SPONSORING AGENCY CODE: 88815709

DESCRIPTOR: *ATTITUDES; ECONOMICS; ENERGY; *ENERGY CONSERVATION; *NATIONAL SURVEYS; POLITICS; POLLUTION; *PUBLIC OPINION; SCIENTISTS; *SURVEYS; *UTILITIES; WASTE DISPOSAL; *NUCLEAR POWER

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$10.03 PLUS POSTAGE.

DESCRIPTIVE NOTE: 176P.; FOR RELATED DOCUMENT, SEE SE 024 368; CONTAINS OCCASIONAL LIGHT AND BROKEN TYPE

ISSUE: RIENOV78

ABSTRACT: THIS PUBLICATION DETAILS A NATIONAL SURVEY DONE BY LOUIS HARRIS AND ASSOCIATES, SIMILAR TO ONE DONE IN 1975, TO ASSESS ATTITUDES TOWARD NUCLEAR POWER IN THE UNITED STATES. THE SURVEY CONSISTED OF THREE PARTS. THE FIRST PART WAS IN-PERSON, DOOR-TO-DOOR INTERVIEWS WITH 1,597 RANDOMLY SELECTED HOUSEHOLDS NATIONWIDE. THE SECOND PART WAS 309 INTERVIEWS, ABOUT ONE HOUR LONG, WITH NEIGHBORS OF NUCLEAR POWER PLANTS IN THREE AREAS OF THE COUNTRY. THE THIRD PART WAS PERSONAL INTERVIEWS WITH 214 POLITICAL, BUSINESS, ENVIRONMENTAL, AND REGULATORY AGENCY LEADERS IN THE NATION. INTERVIEW QUESTIONS AND DATA, DISCUSSIONS OF EACH SECTION OF THE STUDY, AND A GENERAL SUMMARY ARE INCLUDED. SOME OF THE TOPICS EXAMINED ARE THE RISING CONCERN OVER ENERGY SHORTAGES, SUFFICIENCY OF ELECTRIC POWER SUPPLY, UTILITY PRICES, STEPS PROPOSED TO HELP SOLVE THE ENERGY CRISIS, SAFETY, AND ADVANTAGES AND DISADVANTAGES OF NUCLEAR POWER PLANTS. ALSO SURVEYED WERE ATTITUDES IN SUPPORT OR IN OPPOSITION TO NUCLEAR POWER PLANTS AND CONFIDENCE IN UTILITIES, GOVERNMENT, ENVIRONMENTALISTS, AND SCIENTISTS ON NUCLEAR ISSUES. (MR)

INSTITUTION NAME: HARRIS (LOUIS) AND ASSOCIATES, INC., NEW YORK, N.Y.

SPONSORING AGENCY NAME: EBASCO SERVICES INC., NEW YORK, N.Y.

ACCESSION NUMBER: ED156463

CLEARINGHOUSE ACCESSION NUMBER: SE024391

PUBLICATION DATE: 78

TITLE: ENVIRONMENTAL EDUCATION RESOURCE GUIDE.

PERSONAL AUTHOR: DAVIS, DEBBIE; AND OTHERS

INSTITUTION CODE: LYR55350

DESCRIPTOR: *EDUCATIONAL RESOURCES; *ELEMENTARY SECONDARY EDUCATION; ENERGY CONSERVATION; *ENVIRONMENTAL EDUCATION; *INFORMATION SOURCES; NATURAL RESOURCES; POLLUTION; POPULATION EDUCATION; *RESOURCE GUIDES; SCIENCE EDUCATION

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 55P.; NOT AVAILABLE IN HARD COPY DUE TO SMALL PRINT THROUGHOUT ENTIRE DOCUMENT

ISSUE: RIENOV78

ABSTRACT: WHILE THIS GUIDE WAS DESIGNED SPECIFICALLY FOR TEACHERS IN MONTGOMERY COUNTY, MARYLAND, SCHOOLS, MUCH OF THE MATERIAL CAN BE USED BY INDIVIDUALS NATIONWIDE. CONTENTS INCLUDE NATURE STUDIES, POLLUTION, ENERGY, LAND USE, ENVIRONMENTAL DESIGN, RECREATION, AND GOVERNMENT AND THE PUBLIC ASPECT. RESOURCES LISTED UNDER THESE HEADINGS INCLUDE FILMS, TEXTBOOKS, MULTIMEDIA MATERIALS, GUEST SPEAKERS, AND ENVIRONMENTAL UNITS. ATTEMPTS HAVE BEEN MADE TO LIST MATERIALS APPROPRIATE TO GRADES K-12 AND TO LABEL THEM ACCORDING TO AGE OR GRADE LEVELS. FURTHER SECTIONS OF THE GUIDE LIST ORGANIZATIONS, NEWSLETTERS, PERIODICALS, AND GUIDES HAVING TO DO WITH THE ENVIRONMENT. THE FORMAT OF THIS PUBLICATION IS IN THE STYLE OF THE WHOLE EARTH CATALOG, HAVING ILLUSTRATIONS INTERSPERSED AMONG THE COLUMNS OF RESOURCE MATERIALS. WHERE POSSIBLE OR APPROPRIATE, A BRIEF DESCRIPTION OF THE MATERIALS IS INCLUDED. (MA)

INSTITUTION NAME: MONTGOMERY COUNTY PUBLIC SCHOOLS, ROCKVILLE, MD.

ACCESSION NUMBER: ED156466

CLEARINGHOUSE ACCESSION NUMBER: SE024412

PUBLICATION DATE: MAR 78

TITLE: ACTIVITIES OF THE DEPARTMENT OF ENERGY IN ENERGY EDUCATION: A DESCRIPTION OF PROGRAMS FOR SCHOOLS OF THE DEPARTMENT OF ENERGY AND ITS PREDECESSOR AGENCIES.

INSTITUTION CODE: 88815721

DESCRIPTOR: *AGENCY ROLE; *EDUCATIONAL PROGRAMS; *EDUCATIONAL RESPONSIBILITY; ENERGY; *ENERGY CONSERVATION; *FEDERAL PROGRAMS; *INSTRUCTIONAL MATERIALS; PROGRAM DESCRIPTIONS; SCIENCE EDUCATION; *DEPARTMENT OF ENERGY

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$4.67 PLUS POSTAGE.

DESCRIPTIVE NOTE: 82P.; CONTAINS OCCASIONAL LIGHT TYPE

ISSUE: RIENOV78

ABSTRACT: THIS PUBLICATION IS A SUMMARY OF THE ENERGY EDUCATION PROGRAMS THAT EXISTED UPON THE CREATION OF THE DEPARTMENT OF ENERGY. IT SERVES TO REVIEW THE HISTORY OF FEDERAL ENERGY EDUCATION EFFORTS AND AS A STARTING PLACE FOR THE COMPREHENSIVE MISSION OF THIS NEW DEPARTMENT. THIS PUBLICATION IS LIMITED IN FOCUS TO EDUCATIONAL INSTITUTIONS, BUT IT DEALS WITH SOME OF THE RESEARCH ACTIVITIES OF UNIVERSITY FACILITIES. ORGANIZATIONALLY, THIS DOCUMENT HAS SIX PARTS. PART ONE IS AN OVERVIEW. PART TWO SUMMARIZES BOTH STUDENT AND TEACHER ENERGY EDUCATION TRAINING EFFORTS. PART THREE DISCUSSES THE DEVELOPMENT OF ENERGY CURRICULUM MATERIALS. PART FOUR DESCRIBES SOME PAST EDUCATIONAL SPECIAL EVENTS SUCH AS SCIENCE FAIRS, WORKSHOPS, SEMINARS, AND SPECIAL STUDIES IN ENERGY EDUCATION. PART FIVE DISCUSSES PAST EFFORTS BY FEDERAL ENERGY AGENCIES. THE LAST PART DESCRIBES THE ENERGY EXTENSION SERVICE EFFORTS DIRECTLY RELATING TO SCHOOLS. THE PURPOSE OF THIS PUBLICATION IS TO MORE CLEARLY DEFINE THE EDUCATIONAL RESPONSIBILITIES OF THE DEPARTMENT OF ENERGY. (MR)

REPORT NUMBER: DOE/IR-0008

AVAILABILITY: U.S. DEPARTMENT OF ENERGY, TECHNICAL INFORMATION CENTER, P.O. BOX 62, OAK RIDGE, TENNESSEE 37830 (NO PRICE QUOTED)

INSTITUTION NAME: OFFICE OF THE ASSISTANT SECRETARY FOR INTERGOVERNMENTAL AND INSTITUTIONAL RELATIONS (DOE), WASHINGTON, D.C. EDUCATION, BUSINESS AND LABOR AFFAIRS.

ACCESSION NUMBER: ED156474

CLEARINGHOUSE ACCESSION NUMBER: SE024426

PUBLICATION DATE: JAN 78

TITLE: ENERGY EDUCATION RESOURCE GUIDE.

INSTITUTION CODE: UKK76125

SPONSORING AGENCY CODE: BBB06621

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; *ELEMENTARY SECONDARY EDUCATION; *ENERGY; *ENERGY CONSERVATION; *INSTRUCTIONAL MATERIALS; NATURAL RESOURCES; *RESOURCE GUIDES; *RHODE ISLAND

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$3.50 PLUS POSTAGE.

DESCRIPTIVE NOTE: 74P.; CONTAINS LIGHT AND BROKEN TYPE

ISSUE: RIENOV78

ABSTRACT: TO HELP FILL THE NEEDS OF RHODE ISLAND TEACHERS FOR USEFUL ENERGY EDUCATION MATERIALS, THE DISSEMINATION SERVICES UNIT OF THIS STATE'S DEPARTMENT OF EDUCATION HAS COMPILED THIS RESOURCE GUIDE. THE ENTRIES IN THIS DOCUMENT ARE AVAILABLE EITHER FROM ERIC OR FROM THE DISSEMINATION SERVICES UNIT; ED NUMBERS ARE GIVEN FOR ERIC DOCUMENTS, FOR ALL ENTRIES, A BRIEF DESCRIPTION ALONG WITH THE TITLE AND AUTHOR INFORMATION ARE GIVEN. THE PUBLICATION LISTS DOCUMENTS THAT MAY BE OF USE IN GENERAL ENERGY EDUCATION BY GRADE LEVELS: (1) ELEMENTARY, (2) SECONDARY, AND (3) K-12. SELECTED JOURNAL ARTICLES ARE INCLUDED ALONG WITH A RESOURCES SECTION INCLUDING FILMS, PERIODICALS, ORGANIZATIONS, AND RHODE ISLAND RESOURCES ENTRIES. THE 120-PLUS DOCUMENTS ENTERED COVER MANY ASPECTS OF THE ENERGY DILEMMA INCLUDING ECONOMICS, NATURAL RESOURCE ALLOCATION AND USE, FEDERAL ENERGY POLICY, NUCLEAR POWER, AND POSSIBLE SOLUTIONS TO THE PROBLEMS. SOME EMPHASIS IS GIVEN TO THE ENERGY SITUATION IN RHODE ISLAND, BUT THIS RESOURCE GUIDE SHOULD BE USEFUL TO EDUCATORS NATIONWIDE. (MR)

GRANT NUMBER: NIE-G-76-0055

AVAILABILITY: DISSEMINATION UNIT, RHODE ISLAND DEPT. OF EDUCATION, 22 HAYES ST., PROVIDENCE, RHODE ISLAND 02908 (NO PRICE QUOTED)

INSTITUTION NAME: RHODE ISLAND STATE DEPT. OF EDUCATION, PROVIDENCE.

SPONSORING AGENCY NAME: NATIONAL INST. OF EDUCATION (DHEW), WASHINGTON, D.C.

ACCESSION NUMBER: ED156566

CLEARINGHOUSE ACCESSION NUMBER: SO010955

PUBLICATION DATE: JUN 78

TITLE: SOFT TECHNOLOGIES, HARD CHOICES. WORLDWATCH PAPER 21.

PERSONAL AUTHOR: NORMAN, COLIN

INSTITUTION CODE: BBB13108

SPONSORING AGENCY CODE: BBB14927

DESCRIPTOR: *DEPLETED RESOURCES; DEVELOPED NATIONS; DEVELOPING NATIONS; *ECOLOGICAL FACTORS; ENERGY; ENVIRONMENT; FUEL CONSUMPTION; FUTURES (OF SOCIETY); *GLOBAL APPROACH; INDUSTRIAL TECHNOLOGY; NATURAL RESOURCES; POLLUTION; QUALITY OF LIFE; *SOCIAL PROBLEMS; *TECHNOLOGY; TECHNOLOGY TRANSFER; *UNEMPLOYMENT; WATER RESOURCES; WORLD PROBLEMS

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 50P.

ISSUE: RIENOV78

ABSTRACT: THE INFUSION OF TECHNOLOGY INTO SOCIETY HAS CREATED SOCIAL AND ENVIRONMENTAL PROBLEMS AS WELL AS BENEFITS. FOUR CONCERNS LINKED WITH TECHNOLOGY ARE DISCUSSED IN THIS PAPER: RISING UNEMPLOYMENT, GROWING SOCIAL INEQUALITIES, DWINDLING OIL AND GAS RESERVES, AND POTENTIAL LONG-TERM ECOLOGICAL PROBLEMS. INDISCRIMINATE TRANSFER OF MODERN LABOR-SAVING TECHNOLOGY FROM INDUSTRIAL NATIONS TO DEVELOPING NATIONS USES UP CAPITAL AND ENERGY RESOURCES, AND OVERLOOKS THE NEED FOR GREAT NUMBERS OF PEOPLE TO BE EMPLOYED. ALSO, CENTRALIZED TECHNOLOGY CREATES URBAN MIGRATION WHICH MUST BE HALTED BY CREATING PRODUCTIVE EMPLOYMENT IN VILLAGES AND FIELDS. DOMESTIC RESEARCH AND DEVELOPMENT OUGHT TO PRODUCE MORE APPROPRIATE ALTERNATIVES TO IMPORTED MANUFACTURING TECHNOLOGIES. SOCIAL INEQUITIES PRODUCED BY TECHNOLOGY ARE ILLUSTRATED IN DEVELOPING COUNTRIES WHICH OPEN MODERN HOSPITALS FOR THE URBAN ELITE WHEN THE COUNTRIES' MOST SERIOUS PROBLEMS ARE ILLNESSES ASSOCIATED WITH POVERTY. UNEQUAL DISTRIBUTION OF ENERGY CREATED BY CENTRALIZED POWER PLANTS CAN BE ELIMINATED BY DEVELOPING LOCAL SOLAR COLLECTORS, SMALL-SCALE HYDROELECTRIC GENERATORS, AND BIOGAS PLANTS. TECHNOLOGY WHICH USES UNINCLUDING FOSSIL FUEL RESOURCES MUST BE REPLACED BY THOSE WHICH USE RENEWABLE RESOURCES SUCH AS SUNLIGHT, RUNNING WATER, WIND, AND PLANT MATERIALS. TECHNOLOGIES WHICH DAMAGE THE EARTH'S ATMOSPHERE MUST BE ALTERED. IN ORDER FOR TECHNOLOGICAL DEVELOPMENT TO BE MORE COMPATIBLE WITH HUMAN NEEDS AND THE EARTH'S RESOURCES, SOCIETY MUST RECOGNIZE THAT (1) SOME TECHNOLOGIES ARE NO LONGER APPROPRIATE IN CERTAIN COUNTRIES, (2) DEVELOPING NATIONS MUST GENERATE THEIR OWN NEW TECHNOLOGIES, AND (3) TECHNOLOGY CANNOT SOLVE POLITICAL AND SOCIAL PROBLEMS. (AV)

AVAILABILITY: WORLDWATCH INSTITUTE, 1776 MASSACHUSETTS AVENUE, N.W., WASHINGTON, D.C. 20036 ($2.00, PAPER COVER)

INSTITUTION NAME: WORLDWATCH INST., WASHINGTON, D.C.

SPONSORING AGENCY NAME: UNITED NATIONS ENVIRONMENT PROGRAM, NEW YORK, N.Y.

ACCESSION NUMBER: ED157681

CLEARINGHOUSE ACCESSION NUMBER: SE022840

PUBLICATION DATE: 75

TITLE: A CURRICULUM ACTIVITIES GUIDE TO ELECTRIC POWER GENERATION AND THE ENVIRONMENT.

PERSONAL AUTHOR: TULLY, RANDOLPH R., JR., ED.

INSTITUTION CODE: BBB06277

SPONSORING AGENCY CODE: RMQ66000

DESCRIPTOR: CURRICULUM GUIDES; *ELEMENTARY SECONDARY EDUCATION; *ENERGY CONSERVATION; *ENVIRONMENTAL EDUCATION; *INSTRUCTIONAL MATERIALS; LEARNING ACTIVITIES; NATURAL RESOURCES; SCIENCE ACTIVITIES; SCIENCE EDUCATION; TEACHER DEVELOPED MATERIALS; VALUES; PROJECT KARE

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$8.69 PLUS POSTAGE.

DESCRIPTIVE NOTE: 154P.; FOR RELATED DOCUMENTS, SEE SE 022 841-842

ISSUE: RIEDEC78

ABSTRACT: THIS GUIDE WAS DEVELOPED BY TEACHERS INVOLVED IN A WORKSHOP ON "ELECTRIC POWER GENERATION AND THE ENVIRONMENT." ACTIVITY TOPICS ARE: (1) ENERGY AND THE CONSUMER; (2) ENERGY AND WATER POLLUTION; AND (3) ENERGY AND AIR POLLUTION. WITHIN THESE TOPICS, THE ACTIVITIES ARE CLASSIFIED AS AWARENESS LEVEL, TRANSITIONAL LEVEL, OR OPERATIONAL LEVEL. EACH ACTIVITY CONTAINS AN INTRODUCTION, QUESTIONS, EQUIPMENT LIST, AND PROCEDURE. THERE ARE OVER 70 ACTIVITIES FOR STUDENTS IN GRADES 1-12. THE APPENDIX PROVIDES A BRIEF DESCRIPTION OF THE DEVELOPMENT OF THE LEARNING ACTIVITIES IN THIS GUIDE. (MA)

GRANT NUMBER: OEG-71-1775

AVAILABILITY: PROJECT KARE, COLONY OFFICE BLDG., ROUTE 73 & BUTLER PIKE, BLUE BELL, PA. 19422 (NO PRICE QUOTED)

INSTITUTION NAME: PROJECT KARE, BLUE BELL, PA.

SPONSORING AGENCY NAME: OFFICE OF EDUCATION (DHEW), WASHINGTON, D.C.

ACCESSION NUMBER: ED157683

CLEARINGHOUSE ACCESSION NUMBER: SE022842

PUBLICATION DATE: 76

TITLE: A CURRICULUM ACTIVITIES GUIDE TO SELECTED ENVIRONMENTAL TOPICS FOR USE WITH ELEMENTARY AND JUNIOR HIGH SCHOOL STUDENTS.

PERSONAL AUTHOR: SEXTON, ALAN D., ED.

INSTITUTION CODE: BBB06277

SPONSORING AGENCY CODE: RMQ66000

DESCRIPTOR: *CURRICULUM GUIDES; *ELEMENTARY SECONDARY EDUCATION; *ENVIRONMENTAL EDUCATION; *INSTRUCTIONAL MATERIALS; *INTERDISCIPLINARY APPROACH; *LEARNING ACTIVITIES; NATURAL RESOURCES; POLLUTION; POPULATION EDUCATION; SCIENCE EDUCATION; PROJECT KARE

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$7.35 PLUS POSTAGE.

DESCRIPTIVE NOTE: 133P.; FOR RELATED DOCUMENTS, SEE SE 022 840-842

ISSUE: RIEDEC78

ABSTRACT: THIS GUIDE CONTAINS LEARNING ACTIVITIES IN ENVIRONMENTAL EDUCATION DEVELOPED BY TEACHERS AND INTENDED FOR USE AT THE ELEMENTARY OR JUNIOR HIGH SCHOOL LEVELS. TOPICS COVERED INCLUDE: WATER, ESTHETICS, AIR, SOIL AND SEDIMENT, SOLID WASTE, ENERGY, NOISE, POPULATION, AND TRANSPORTATION. GENERALLY, EACH ACTIVITY CONTAINS AN INTRODUCTION, A LISTING OF MATERIALS, THE STATEMENT OF PROCEDURE, AND SEVERAL APPROPRIATE QUESTIONS TO ASK THE STUDENTS. ACTIVITIES ARE INTERDISCIPLINARY AND INCLUDE POND STUDIES, POETRY WRITING, AND ART WORK. THE APPENDIX CONTAINS INFORMATION ABOUT THE DEVELOPMENT AND WRITING OF THIS CURRICULUM GUIDE. (MA)

GRANT NUMBER: OEG-71-1775

AVAILABILITY: PROJECT KARE, COLONY OFFICE BLDG., ROUTE 73 & BUTLER PIKE, BLUE BELL, PA. 19422 (NO PRICE QUOTED)

INSTITUTION NAME: PROJECT KARE, BLUE BELL, PA.

SPONSORING AGENCY NAME: OFFICE OF EDUCATION (DHEW), WASHINGTON, D.C.

ACCESSION NUMBER: ED157704

CLEARINGHOUSE ACCESSION NUMBER: SE024471

PUBLICATION DATE: APR 78

TITLE: THE SOLAR ENERGY TIMETABLE. WORLDWATCH PAPER 19.

PERSONAL AUTHOR: HAYES, DENIS

INSTITUTION CODE: BBB13108

DESCRIPTOR: *CONSERVATION (ENVIRONMENT); ECOLOGICAL FACTORS; *ECONOMICS; *ENERGY; *ENVIRONMENTAL EDUCATION; FUELS; NATURAL RESOURCES; SCIENCE EDUCATION; *SOLAR RADIATION; *TECHNOLOGY; VALUES

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 43P.; NOT AVAILABLE IN HARD COPY DUE TO COPYRIGHT RESTRICTIONS

ISSUE: RIEDEC78

ABSTRACT: THIS PUBLICATION PROPOSES A TIMETABLE FOR CONVERTING THE WORLD ECONOMY TO SOLAR ENERGY. THE CONTENTS INCLUDE: (1) A SOLAR-POWERED WORLD BY 2025; (2) HEATING AND COOLING; (3) RENEWABLE FUELS; (4) ELECTRICITY; (5) GETTING THERE FROM HERE; AND (6) NOTES. NUMEROUS FACTS ARE PRESENTED WITHIN THESE SECTIONS. INTERNATIONAL SOLAR RESEARCH PROGRAMS ARE REVIEWED BRIEFLY FOR SWEDEN, JAPAN, DENMARK, BRITAIN, AUSTRALIA, BRAZIL, AND CHINA. A GLOBAL ENERGY POLICY IS RECOMMENDED. (MA)

AVAILABILITY: WORLDWATCH INSTITUTE, 1776 MASSACHUSETTS AVE., N.W., WASHINGTON, D.C. 20036 ($2.00)

INSTITUTION NAME: WORLDWATCH INST., WASHINGTON, D.C.

ACCESSION NUMBER: ED157720

CLEARINGHOUSE ACCESSION NUMBER: SE024663

PUBLICATION DATE: 77

TITLE: SLASH YOUR ENERGY BILLS.

PERSONAL AUTHOR: LAWRENCE, ALLEN

INSTITUTION CODE: 88815819

DESCRIPTOR: *CLIMATE CONTROL; *CONSERVATION (ENVIRONMENT); ECONOMICS; *ENERGY CONSERVATION; ENVIRONMENTAL EDUCATION; *FUEL CONSUMPTION; GUIDES; *HOUSING; NATURAL RESOURCES; SCIENCE EDUCATION

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 69P.; NOT AVAILABLE IN HARD COPY DUE TO COPYRIGHT RESTRICTIONS; BLUE PRINT MAY NOT REPRODUCE WELL

ISSUE: RIEDEC78

ABSTRACT: TIPS ARE GIVEN HERE FOR ENERGY CONSERVATION IN THE HOME. INCLUDED ARE HEATING AND COOLING HOUSES, WATER HEATING, BATHING, CLOTHES WASHING, AND DRYING, COOKING, REFRIGERATING, DISHWASHING, LIGHTING, AND DRIVING. ALSO INCLUDED IS A TABLE OF ANNUAL ENERGY REQUIREMENTS OF HOUSEHOLD ELECTRIC APPLIANCES. (BB)

AVAILABILITY: AMBIENTE ENVIRONMENTAL CONCERNS, P.O. BOX 13022, SAN ANTONIO, TEXAS 78213 (INSTITUTIONS $1.65, GENERAL PUBLIC $2.50, QUANTITY PRICES AVAILABLE)

INSTITUTION NAME: AMBIENTE ENVIRONMENTAL CONCERNS, SAN ANTONIO, TEX.

ACCESSION NUMBER: ED157726

CLEARINGHOUSE ACCESSION NUMBER: SE024695

PUBLICATION DATE: 78

TITLE: SELECTED ENERGY CONSERVATION OPTIONS FOR HOMEOWNERS: OPTIONS, EXPENSES AND PAYOFFS.

PERSONAL AUTHOR: LENGYEL, DOROTHY L.; AND OTHERS

INSTITUTION CODE: SYN71965

DESCRIPTOR: *CHECK LISTS; CONSERVATION (ENVIRONMENT); CONSUMER ECONOMICS; COST EFFECTIVENESS; ELECTRICAL APPLIANCES; ENERGY; *ENERGY CONSERVATION; FUELS; *HOME MANAGEMENT; UTILITIES; *ENERGY EDUCATION

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$1.67 PLUS POSTAGE.

DESCRIPTIVE NOTE: 17P.

ISSUE: RIEDEC78

ABSTRACT: THIS PUBLICATION IS A CHECK LIST FOR HOMEOWNERS AND RENTERS TO HELP THEM REDUCE ENERGY COSTS. THE LIST CONSISTS OF 126 ENERGY CONSERVATION OPTIONS. THESE OPTIONS RANGE FROM "CHANGE CLOTHES INSTEAD OF ADJUSTING THERMOSTAT" AND "AIR CONDITIONERS TURNED OFF WHEN NOT HOME" TO "USE SINK STOPPER" AND "WEATHERSTRIPPING AND CAULKING APPLIED." FOR EACH OPTION, DEGREE OF EXPENSE (NO EXPENSE, LITTLE EXPENSE, SIGNIFICANT EXPENSE) AND DEGREE OF PAYBACK (FAIR PAYBACK, GOOD PAYBACK, EXCELLENT PAYBACK) COLUMNS ARE CHECKED TO ILLUSTRATE THE EFFICIENCY OF EACH OPTION. THE MOST EFFICIENT OPTION IS ONE THAT IS CHECKED "NO EXPENSE" AND "EXCELLENT PAYBACK." THE DEGREE OF IMPLEMENTATION COLUMN ALLOWS THE RESIDENT TO INDICATE WHETHER A PARTICULAR OPTION IS USED NEVER, SOMETIMES, OR ALWAYS. ONCE THE CHECK LIST IS COMPLETED ONE CAN SEE WHERE ENERGY COSTS CAN BE CUT AND HOW TO CUT THEM. (MK)

INSTITUTION NAME: PENNSYLVANIA STATE UNIV., UNIVERSITY PARK. COOPERATIVE EXTENSION SERVICE.

ACCESSION NUMBER: ED157744

CLEARINGHOUSE ACCESSION NUMBER: SE024718

PUBLICATION DATE: 77

TITLE: NATIONAL SCIENCE TEACHERS ASSOCIATION FACTSHEET NO. 18: ALTERNATIVE ENERGY SOURCES - A GLOSSARY OF TERMS.

PERSONAL AUTHOR: FOWLER, JOHN M.; KRYGER, KING C.

INSTITUTION CODE: FGK57300

SPONSORING AGENCY CODE: 88815419

DESCRIPTOR: *ENERGY; ENERGY CONSERVATION; ENVIRONMENTAL EDUCATION; *FUELS; *GLOSSARIES; INSTRUCTIONAL MATERIALS; *RESOURCE MATERIALS; SCIENCE EDUCATION; SCIENCES; *NATIONAL SCIENCE TEACHERS ASSOCIATION

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$1.67 PLUS POSTAGE.

DESCRIPTIVE NOTE: 9P.; CONTAINS OCCASIONAL LIGHT TYPE

ISSUE: RIEDEC78

ABSTRACT: THIS GLOSSARY OF OVER 100 ENERGY-RELATED TERMS IS INTENDED TO ACCOMPANY THE NATIONAL SCIENCE TEACHERS ASSOCIATION'S (NSTA) FACT SHEET ON ALTERNATIVE ENERGY TECHNOLOGIES. BRIEF DEFINITIONS OF COMMON CONCEPTS, PRINCIPLES, AND EXPRESSIONS RELATED TO ENERGY EDUCATION ARE PROVIDED. (AUTHOR/CP)

REPORT NUMBER: EDM-1043-18

AVAILABILITY: DEPARTMENT OF ENERGY, TECHNICAL INFORMATION CENTER, P.O. BOX 62, OAK RIDGE, TENNESSEE 37830 (FREE)

INSTITUTION NAME: NATIONAL SCIENCE TEACHERS ASSOCIATION, WASHINGTON, D.C.

SPONSORING AGENCY NAME: DEPARTMENT OF ENERGY, WASHINGTON, D.C.

ACCESSION NUMBER: ED157759

CLEARINGHOUSE ACCESSION NUMBER: SE024761

PUBLICATION DATE: 75

TITLE: THE THUMBS UP ECOLOGY CURRICULUM: A FUN GROUP OF SCHOOL SITE ACTIVITIES FOR SIXTH GRADERS.

PERSONAL AUTHOR: SMITH, JOHN; AND OTHERS

INSTITUTION CODE: 88812867

DESCRIPTOR: *BIOLOGICAL SCIENCES; BOTANY; *CONSERVATION EDUCATION; ECOLOGY; *ELEMENTARY EDUCATION; ENERGY; *ENVIRONMENTAL EDUCATION; *INSTRUCTIONAL MATERIALS; LAND USE; TREES; ZOOLOGY

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$2.06 PLUS POSTAGE.

DESCRIPTIVE NOTE: 44P.; CONTAINS OCCASIONAL LIGHT AND BROKEN TYPE

ISSUE: RIEDEC78

ABSTRACT: THIS GUIDE IS A COLLECTION OF "FUN" SCHOOL SITE ACTIVITIES FOR SIXTH GRADERS. SOME OF THE TOPICS COVERED ARE: ANIMALS, TREES, ENERGY AND LIFESTYLE, LAND USE AND YOU, ENERGY CONSERVATION, AND CAR-POOLING. EACH SECTION OFFERS BOTH INTRODUCTORY INFORMATION ABOUT THE TOPIC AS WELL AS QUESTIONS TO PONDER SUCH AS WHAT, SO WHAT, NOW WHAT, AND ANOTHER WAY TO LOOK AT IT. (AUTHOR/RH)

INSTITUTION NAME: FLORIDA STATE DEPT. OF EDUCATION, TALLAHASSEE. OFFICE OF ENVIRONMENT EDUCATION.

ACCESSION NUMBER: ED157761

CLEARINGHOUSE ACCESSION NUMBER: SE024763

PUBLICATION DATE: 1 JUL 77

TITLE: FLORIDA MASTER PLAN AND ACTION GUIDE FOR ENERGY EDUCATION.

PERSONAL AUTHOR: HAMMOND, WILLIAM; AND OTHERS

INSTITUTION CODE: 88812867

DESCRIPTOR: *ELEMENTARY SECONDARY EDUCATION; *ENERGY; ENVIRONMENTAL EDUCATION; OBJECTIVES; *POLICY; *PROGRAM DEVELOPMENT; *FLORIDA; STATE PLANS; STATE ROLE

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$2.06 PLUS POSTAGE.

DESCRIPTIVE NOTE: 44P.; CONTAINS OCCASIONAL LIGHT AND BROKEN TYPE

ISSUE: RIEDEC78

ABSTRACT: THIS MASTER PLAN FOR ENERGY EDUCATION CONSISTS OF THE FOLLOWING SECTIONS: (1) A RATIONALE STATEMENT; (2) AN ENERGY POLICY STATEMENT; (3) GENERAL GOALS AND OBJECTIVES; (4) A STATUS REPORT FOR EXISTING ENERGY EDUCATION PROGRAMS IN FLORIDA; (5) AN OVERVIEW OF ALTERNATIVE STRATEGIES FOR IMPLEMENTING AN ENERGY EDUCATION PROGRAM STATEWIDE; (6) ORGANIZATIONAL AND IMPLEMENTATION STRUCTURE; (7) IMPLEMENTATION PLAN AND PROGRAM FOR MAJOR ENERGY EDUCATION TARGET GROUPS; (8) EVALUATION AND ASSESSMENT PROGRAMS; AND (9) ENVIRONMENTAL RESIDUAL EFFORTS. (AUTHOR/RH)

INSTITUTION NAME: FLORIDA STATE DEPT. OF EDUCATION, TALLAHASSEE. OFFICE OF ENVIRONMENT EDUCATION.

ACCESSION NUMBER: ED157765

CLEARINGHOUSE ACCESSION NUMBER: SE024767

PUBLICATION DATE: 77

TITLE: COLUMBIA COUNTY ENVIRONMENTAL RESOURCE GUIDE, GRADES 7-12.

PERSONAL AUTHOR: BOUIE, ROSA; AND OTHERS

INSTITUTION CODE: 88812867

DESCRIPTOR: CONSERVATION EDUCATION; CURRICULUM GUIDES; ENERGY; *ENVIRONMENTAL EDUCATION; *INSTRUCTIONAL MATERIALS;

NATURAL RESOURCES; POLLUTION; POPULATION EDUCATION; *SECONDARY EDUCATION; TEACHING GUIDES

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 113P.; NOT AVAILABLE IN HARD COPY DUE TO MARGINAL LEGIBILITY OF ORIGINAL DOCUMENT

ISSUE: RIEDEC78

ABSTRACT: THIS ENVIRONMENTAL RESOURCE GUIDE CONSISTS OF OBJECTIVES FOR GRADES 7-12 AND ACTIVITIES FOR JUNIORS AND SENIORS IN HIGH SCHOOLS. THE ENVIRONMENTAL OBJECTIVES INCLUDE UNDERSTANDING THE FOLLOWING CONCEPTS: (1) INTERDEPENDENCY IN NATURE; (2) FINITE RESOURCES; (3) WISE USE OF RESOURCES; (4) CHANGE; AND (5) MAN'S ENVIRONMENTAL RESPONSIBILITY. THE ACTIVITIES ARE DIVIDED INTO TWO SECTIONS: (1) NATURAL RESOURCES - WATER, AIR, LAND, AND ENERGY; AND (2) POPULATION PATTERNS - POPULATION PROBLEMS, POLLUTION. EACH ACTIVITY CONSISTS OF A TITLE, OBJECTIVES, PROCEDURES, SUGGESTIONS FOR TEACHERS, AND A CREDIT LINE. (AUTHOR/RM)

INSTITUTION NAME: FLORIDA STATE DEPT. OF EDUCATION, TALLAHASSEE. OFFICE OF ENVIRONMENT EDUCATION.

ACCESSION NUMBER: ED157782

CLEARINGHOUSE ACCESSION NUMBER: SE024798

PUBLICATION DATE: 78

TITLE: ENERGY: SELECTED RESOURCE MATERIALS FOR DEVELOPING ENERGY EDUCATION/CONSERVATION PROGRAMS. REVISED EDITION.

PERSONAL AUTHOR: WERT, JONATHAN M.; WORTHINGTON, BARRY K.

INSTITUTION CODE: BBB06081

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; BOOKS; CLASSROOM MATERIALS; *CURRICULUM DEVELOPMENT; ENERGY; *ENERGY CONSERVATION; INSTRUCTIONAL MATERIALS; RESOURCE MATERIALS; *ENERGY EDUCATION

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 34P.; FOR RELATED DOCUMENTS, SEE SE 024 799-800; BUT AVAILABLE IN HARD COPY DUE TO MARGINAL LEGIBILITY OF ORIGINAL DOCUMENT

ISSUE: RIEDEC78

ABSTRACT: THIS ANNOTATED BIBLIOGRAPHY PRESENTS RESOURCE MATERIALS FOR ENERGY EDUCATION PROGRAMS. THE MATERIALS ARE LISTED BY THE AGENCY FROM WHICH THEY ARE AVAILABLE. THE AGENCIES ARE ALPHABETIZED AND, FOR EACH AGENCY, A MAILING ADDRESS IS GIVEN. FIFTY GIVEN AGENCIES ARE INCLUDED, MANY OF WHICH HAVE SEVERAL REFERENCES LISTED UNDER THEM. FOR EACH REFERENCE, TITLE, AUTHOR, AND PUBLICATION DATE ARE GIVEN ALONG WITH A FOUR TO FIVE LINE ANNOTATION WHICH DESCRIBES THE CONTENTS OF THE REFERENCE AND POSSIBLE USES. SOME REFERENCES ALSO INCLUDE NUMBER OF PAGES AND PRICES. THE REFERENCES IN THIS BIBLIOGRAPHY WERE SELECTED TO BE USEFUL TO THOSE INVOLVED IN DEVELOPING OR IMPLEMENTING AN ENERGY EDUCATION OR ENERGY CONSERVATION PROGRAM EITHER IN THE SCHOOLS OR IN COMMUNITY GROUPS. THE VARIETY OF REFERENCES INCLUDES TEACHING GUIDES; CURRICULUM DEVELOPMENT GUIDES; LEARNING ACTIVITIES; ENERGY EDUCATION UNITS; "HOW-TO-DO-IT" MATERIALS FOR SOLAR POWER PROJECTS, AND CONSUMER AWARENESS PUBLICATIONS. (MR)

AVAILABILITY: NATIONAL WILDLIFE FEDERATION, 1412 16TH STREET, N.W., WASHINGTON, D.C. 20036 (SINGLE COPIES FREE)

INSTITUTION NAME: PENNSYLVANIA STATE UNIV., UNIVERSITY PARK. COLL. OF AGRICULTURE.

ACCESSION NUMBER: ED157785

CLEARINGHOUSE ACCESSION NUMBER: SE024803

PUBLICATION DATE: SEP 75

TITLE: A COMMUNITY PLANNING GUIDE TO WEATHERIZATION.

INSTITUTION CODE: BBB06102

DESCRIPTOR: *ACTION PROGRAMS (COMMUNITY); *COST EFFECTIVENESS; *ENERGY CONSERVATION; ENVIRONMENTAL CRITERIA; HEATING; LOW RENT HOUSING; *PROGRAM GUIDES; PROGRAM PLANNING; URBAN RENEWAL AGENCIES; UTILITIES; COMMUNITY SERVICES ADMINISTRATION; *INSULATION; *WEATHERIZATION

EDRS PRICE: EDRS PRICE MF-$0.83 HC-$2.06 PLUS POSTAGE.

DESCRIPTIVE NOTE: 40P.; CONTAINS COLORED PRINT WHICH MAY NOT REPRODUCE WELL AND TABLE ON LAST PAGE CONTAINS SMALL TYPE

ISSUE: RIEDEC78

ABSTRACT: THIS PUBLICATION OF THE COMMUNITY SERVICES ADMINISTRATION is A GUIDE FOR COMMUNITY ACTION AGENCIES (CAA'S) PROGRAMS FOR HOME ENERGY CONSERVATION. CAA'S INVOLVED WITH RENOVATION OF DWELLINGS IN POOR AND DEPRESSED AREAS ARE GIVEN IN THIS GUIDE AND STEP-BY-STEP INSTRUCTIONS FOR ADMINISTERING THEIR WEATHERIZATION PROGRAMS. CONTENTS INCLUDE: (1) A DISCUSSION OF THE PROBLEM OF LOW INCOME DWELLING WEATHERIZATION; (2) PURPOSE OF THE GUIDE; (3) OVERALL GUIDELINES FOR WEATHERIZATION PROGRAMS; (4) REQUIREMENTS AND RECOMMENDATIONS FOR THE PROJECTS; (5) PROBLEMS THAT NEED TO BE HANDLED FROM THE OUTSET; (6) PLANNING THE WORK ON INDIVIDUAL HOUSES; AND (7) IMPORTANT CONSIDERATIONS PRIOR TO IMPLEMENTATION. TABLES INCLUDE: (1) HEATING INDEX; (2) OPTIMAL COMBINATIONS OF ENERGY CONSERVATION TECHNIQUES BY HEATING INDEX; (3) R-VALUES AND INCHES; APPROXIMATE CONVERSIONS FOR VARIOUS KINDS OF INSULATION; (4) ASSUMED MATERIALS COST; AND (5) COST ESTIMATES. FORMS FOR BUILDING WEATHERIZATION PLANS ARE AMONG THE APPENDICES. ALTHOUGH THIS PUBLICATION IS INTENDED FOR CAA'S, THE APPROACH OF A BUILDING WEATHERIZATION PLAN AND THE METHODS FOR REALIZING SUCH A PLAN AS PRESENTED IN THIS GUIDE COULD WELL BE USED BY INDIVIDUAL HOMEOWNERS AND LANDLORDS AS WELL. (MR)

AVAILABILITY: COMMUNITY SERVICES ADMINISTRATION, 1200 19TH STREET, N.W., WASHINGTON, D.C. 20506 (FREE)

INSTITUTION NAME: COMMUNITY SERVICES ADMINISTRATION (DHEW), WASHINGTON, D.C.

ACCESSION NUMBER: ED157817

CLEARINGHOUSE ACCESSION NUMBER: SO011027

PUBLICATION DATE: FEB 78

TITLE: BRINGING ENERGY TO THE PEOPLE: WASHINGTON, D.C. AND GHANA. GRADES 6,7. INTERDISCIPLINARY STUDENT/TEACHER MATERIALS IN ENERGY, THE ENVIRONMENT, AND THE ECONOMY.

INSTITUTION CODE: PGK57300

SPONSORING AGENCY CODE: BBB15721

DESCRIPTOR: CLASS ACTIVITIES; *COMPARATIVE ANALYSIS; CROSS CULTURAL STUDIES; ELEMENTARY SECONDARY EDUCATION; *ENERGY; *ENERGY CONSERVATION; GRADE 6; GRADE 7; GRAPHS; INTERDISCIPLINARY APPROACH; INTERMEDIATE GRADES; JUNIOR HIGH SCHOOLS; LESSON PLANS; MAP SKILLS; PHYSICAL GEOGRAPHY; SCIENCES; SOCIAL STUDIES UNITS; TEACHER DEVELOPED MATERIALS; *WORLD GEOGRAPHY; *DISTRICT OF COLUMBIA; *GHANA (ACCRA)

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 69P.; FOR RELATED DOCUMENTS, SEE SO 011 028-030 ; BEST COPY AVAILABLE

ISSUE: RIEDEC78

ABSTRACT: THIS INSTRUCTIONAL UNIT CONTAINS FOUR CLASSROOM LESSONS DEALING WITH ENERGY FOR USE IN GRADES SIX AND SEVEN. THE OVERALL OBJECTIVE IS TO PROVIDE STUDENTS WITH A COMPARATIVE OVERVIEW OF TWO BASIC ENERGY CONCEPTS: ENERGY IS A BASIC NEED IN ALL CULTURES; AND ENERGY USE AFFECTS THE WAY PEOPLE LIVE. IN THE LESSONS, WHICH CAN EASILY BE INTEGRATED INTO STUDIES OF WORLD CULTURES AND PHYSICAL GEOGRAPHY OF THE WORLD, STUDENTS COMPARE ACCRA, GHANA, WITH THE WASHINGTON, D.C. AREA IN TERMS OF CLIMATE; GEOGRAPHIC LOCATION; ENERGY DEPENDENCE; AND SERVICES THAT MEET THEIR NEEDS. THE FOUR LESSONS DEVELOPED BY TEACHERS ARE: (1) A GEOGRAPHICAL PICTURE OF TWO CITIES; (2) TRACING THE SOURCES OF ELECTRIC POWER IN GHANA AND IN THE WASHINGTON, D.C. AREA; (3) TWO TRANSPORTATION SYSTEMS: HOW ARE THEY ALIKE? HOW ARE THEY DIFFERENT; AND (4) HOW IS ELECTRICITY USED IN TWO DIFFERENT CULTURES? THE SECOND LESSON CAN ALSO BE TAUGHT IN SCIENCE COURSES. STUDENTS CONSTRUCT CLIMAGRAPHS, ANALYZE AND INTERPRET FACT SHEET MAPS AND BAR GRAPHS, ANSWER QUESTIONS ABOUT HIGHWAY AND ROAD MAPS, AND EXAMINE CASE STUDIES. A TIME ALLOTMENT VARYING FROM ONE TO FOUR CLASSES FOR EACH OF THE FOUR LESSONS IS SUGGESTED, BUT WILL PROBABLY VARY DEPENDING ON STUDENT INTEREST AND ABILITY. EACH LESSON CONTAINS COMPLETE TEACHER AND STUDENT MATERIALS BACKGROUND INFORMATION FOR THE TEACHER ON THE TOPIC UNDER STUDY. (AUTHOR/RM)

REPORT NUMBER: HCP/U3841-0006

CONTRACT NUMBER: EX-76C-10-3841

AVAILABILITY: U.S. DEPARTMENT OF ENERGY, TECHNICAL INFORMATION OFFICE, P.O. BOX 62, OAK RIDGE, TENNESSEE 37830 (FREE, PAPER COVER)

INSTITUTION NAME: NATIONAL SCIENCE TEACHERS ASSOCIATION, WASHINGTON, D.C.

SPONSORING AGENCY NAME: OFFICE OF THE ASSISTANT SECRETARY FOR INTERGOVERNMENTAL AND INSTITUTIONAL RELATIONS (DOE), WASHINGTON, D.C. EDUCATION, BUSINESS AND LABOR AFFAIRS.

ACCESSION NUMBER: ED157818

CLEARINGHOUSE ACCESSION NUMBER: SO011028

PUBLICATION DATE: JAN 78

TITLE: AN ENERGY HISTORY OF THE UNITED STATES. GRADES 8-9. INTERDISCIPLINARY STUDENT/TEACHER MATERIALS IN ENERGY, THE ENVIRONMENT, AND THE ECONOMY.

INSTITUTION CODE: PGK57300

SPONSORING AGENCY CODE: BBB15721

DESCRIPTOR: CLASS ACTIVITIES; *ENERGY; ENERGY CONSERVATION; GRADE 8; GRADE 9; *INTERDISCIPLINARY APPROACH; LESSON PLANS; MATHEMATICS; *NATURAL RESOURCES; SCIENCES; SECONDARY EDUCATION; SOCIAL STUDIES UNITS; TEACHER DEVELOPED MATERIALS; *UNITED STATES HISTORY

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 120P.; FOR RELATED DOCUMENTS, SEE SO 011 027-030 ; BEST COPY AVAILABLE

ISSUE: RIEDEC78

ABSTRACT: THIS INSTRUCTIONAL UNIT CONTAINS EIGHT CLASSROOM LESSONS DEALING WITH A HISTORY OF ENERGY IN THE UNITED STATES FOR USE IN GRADE EIGHT AND NINE SOCIAL STUDIES, SCIENCE, AND MATHEMATICS COURSES. THE LESSONS WERE DEVELOPED BY TEACHERS. THE OVERALL OBJECTIVE IS TO HELP STUDENTS UNDERSTAND THE PRESENT NECESSITY TO REEXAMINE AND PERHAPS ALTER OUR PRESENT ENERGY PATTERNS. STUDENTS STUDY ABOUT THE IMPACT THAT THE DIFFERENT TYPES OF ENERGY USED FROM COLONIAL TIMES TO THE PRESENT HAVE HAD ON U.S. CULTURE AND LEARN ABOUT THE PHYSICAL PROPERTIES OF WOOD, COAL, AND OIL, PARTICULARLY ABOUT THE ABILITY OF THESE SUBSTANCES TO GIVE HEAT. THE ACTIVITIES IN WHICH STUDENTS ARE INVOLVED INCLUDE ANSWERING QUESTIONS BASED ON SHORT READING SELECTIONS; GATHERING AND INTERPRETING MATERIALS FROM A PICTURE; COMPARING THE USES OF ENERGY BY A COLONIAL FARM FAMILY AND BY A FAMILY OF TODAY; CONSTRUCTING A CAN CALORIMETER; LEARNING HOW TO DETERMINE THE ENERGY CONTENT OF WOOD;

APPLYING THE PRINCIPLES OF SCIENTIFIC MOTIVATION TO ENERGY DATA; CONSTRUCTING AND INTERPRETING GRAPHS; MAKING A MODEL OF A STEAM TURBINE; AND LEARNING HOW TO DETERMINE THE HEAT CONTENT OF OIL. THE AMOUNT OF TIME NEEDED TO TEACH EACH LESSON VARIES FROM ONE TO FOUR CLASSROOM PERIODS. EACH LESSON IS SELF-CONTAINED, AND INCLUDES INSTRUCTIONS FOR THE TEACHER AND STUDENT MATERIALS. THE EIGHT LESSONS ARE ORGANIZED INTO THREE UNITS: (1) AMERICA'S WOODEN AGE (1636-1860); (2) THE COMING OF COAL (1840-1920); AND (3) OIL: BRIGHT PROMISE (1880-PRESENT). (AUTHOR/RM)

REPORT NUMBER: HCP/U3841-0004

CONTRACT NUMBER: EX-76C-10-3841

AVAILABILITY: U.S. DEPARTMENT OF ENERGY, TECHNICAL INFORMATION OFFICE, P.O. BOX 62, OAK RIDGE, TENNESSEE 37830 (FREE, PAPER COVER)

INSTITUTION NAME: NATIONAL SCIENCE TEACHERS ASSOCIATION, WASHINGTON, D.C.

SPONSORING AGENCY NAME: OFFICE OF THE ASSISTANT SECRETARY FOR INTERGOVERNMENTAL AND INSTITUTIONAL RELATIONS (DOE), WASHINGTON, D.C. EDUCATION, BUSINESS AND LABOR AFFAIRS.

ACCESSION NUMBER: ED157819

CLEARINGHOUSE ACCESSION NUMBER: SO011029

PUBLICATION DATE: MAR 78

TITLE: ENERGY IN THE GLOBAL MARKETPLACE, GRADES 9, 10, 11. INTERDISCIPLINARY STUDENT/TEACHER MATERIALS IN ENERGY, THE ENVIRONMENT, AND THE ECONOMY.

INSTITUTION CODE: PGK57300

SPONSORING AGENCY CODE: 88015721

DESCRIPTOR: CLASS ACTIVITIES; *ECONOMIC EDUCATION; ECONOMICS; *ENERGY; *GLOBAL APPROACH; GRADE 9; GRADE 10; GRADE 11; LESSON PLANS; SECONDARY EDUCATION; SOCIAL STUDIES UNITS; TEACHER DEVELOPED MATERIALS; WORLD GEOGRAPHY

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 54P.; FOR RELATED DOCUMENTS, SEE SO 011 027-030 ; BEST COPY AVAILABLE

ISSUE: RIEDEC78

ABSTRACT: THIS INSTRUCTIONAL UNIT CONTAINS SIX CLASSROOM LESSONS IN WHICH 9TH, 10TH, OR 11TH GRADE SOCIAL STUDIES STUDENTS EXAMINE THE EFFECTS OF COMPETITION AMONG NATIONS AND WORLD REGIONS AS DEMAND FOR OIL OUTSTRIPS SUPPLY. THE OVERALL OBJECTIVE IS TO HELP STUDENTS UNDERSTAND THE CONCEPT THAT ENERGY IS A COMMODITY TO BE BOUGHT AND SOLD LIKE ANY OTHER COMMODITY BUT IN A MARKETPLACE THAT IS A GLOBAL ONE. THE LESSONS WERE WRITTEN BY TEACHERS AND CAN BE INTEGRATED INTO SOCIAL STUDIES, ECONOMICS, WORLD HISTORY, CONTEMPORARY ISSUES, AND WORLD GEOGRAPHY COURSES. THE LESSONS ARE: (1) WHY SOME NATIONS USE MORE ENERGY; (2) ENERGY: WHO HAS IT? WHO NEEDS IT?; (3) FROM THOSE WHO HAVE TO THOSE WHO WANT: THE OIL TRADE ROUTES; (4) WHAT IF...EVERYONE WANTS MORE?; (5) RETRODOLLARS: THE PROBLEM OF TOO MUCH MONEY; AND (6) THE OIL PRICE GAME -- EVERYBODY PLAYS (A SIMULATION OF THE WORLD MARKET FOR OIL). THE ACTIVITIES IN WHICH STUDENTS ARE INVOLVED INCLUDE ANALYZING MAPS, GRAPHS, AND CHARTS; ANSWERING QUESTIONS BASED ON SHORT READING SELECTIONS; AND PLAYING GAMES. EACH LESSON CAN BE TAUGHT IN ONE CLASSROOM PERIOD. ALL TEACHERS AND STUDENT MATERIALS ARE INCLUDED. (AUTHOR/RM)

REPORT NUMBER: HCP/U3841-0007

CONTRACT NUMBER: EX-76C-10-3841

AVAILABILITY: U.S. DEPARTMENT OF ENERGY, TECHNICAL INFORMATION OFFICE, P.O. BOX 62, OAK RIDGE, TENNESSEE 37830 (FREE, PAPER COVER)

INSTITUTION NAME: NATIONAL SCIENCE TEACHERS ASSOCIATION, WASHINGTON, D.C.

SPONSORING AGENCY NAME: OFFICE OF THE ASSISTANT SECRETARY FOR INTERGOVERNMENTAL AND INSTITUTIONAL RELATIONS (DOE), WASHINGTON, D.C. EDUCATION, BUSINESS AND LABOR AFFAIRS.

ACCESSION NUMBER: ED157820

CLEARINGHOUSE ACCESSION NUMBER: SO011030

PUBLICATION DATE: JAN 78

TITLE: U.S. ENERGY POLICY -- WHICH DIRECTION? GRADES 11 AND 12. INTERDISCIPLINARY STUDENT/TEACHER MATERIALS IN ENERGY, THE ENVIRONMENT, AND THE ECONOMY.

INSTITUTION CODE: PGK57300

SPONSORING AGENCY CODE: 88015721

DESCRIPTOR: CASE STUDIES; CLASS ACTIVITIES; DECISION MAKING; *ENERGY; *ENERGY CONSERVATION; FUTURES (OF SOCIETY); GRADE 11; GRADE 12; INTERDISCIPLINARY APPROACH; LESSON PLANS; *POLICY FORMATION; *PRESIDENTS; SCIENCES; SENIOR HIGH SCHOOLS; SOCIAL STUDIES UNITS; TEACHER DEVELOPED MATERIALS

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 92P.; FOR RELATED DOCUMENTS, SEE SO 011 027-029 ; BEST COPY AVAILABLE

ISSUE: RIEDEC78

ABSTRACT: THIS INSTRUCTIONAL UNIT FOR USE IN 11TH AND 12TH GRADE SOCIAL STUDIES AND SCIENCE COURSES CONTAINS SIX CLASSROOM LESSONS DEALING WITH UNITED STATES ENERGY POLICY. THE OVERALL OBJECTIVE IS TO HELP STUDENTS UNDERSTAND HOW CIRCUMSTANCES, PRESENT AND PROPOSED LEGISLATION, POLITICAL ACTION, AND THE CONSTITUTION ITSELF BECOME LINKED IN THE DEVELOPMENT OF A NATIONAL POLICY. THE LESSONS, DEVELOPED BY TEACHERS, ARE: (1) THE NIGHTMARE LIFE WITHOUT FUEL; (2) HOW CAN THE UNITED STATES REDUCE ITS DEPENDENCE ON FOREIGN OIL?; (3) THE PRESIDENT'S POWERS: WHERE THEY COME FROM AND HOW THEY ARE USED; (4) ADVANTAGES AND DISADVANTAGES OF COAL; (5) TOWARD THE FUTURE: THE ADVANTAGES OF HAVING A NATIONAL ENERGY PLAN; (6) AN ENERGY POLICY IS BORN. ACTIVITIES IN WHICH STUDENTS ARE INVOLVED INCLUDE DISCUSSING THE SHORT READING SELECTIONS; ANALYZING GRAPHS AND RESEARCH; AND ANALYZING A CASE STUDY DEALING WITH PRESIDENT CARTER'S ENERGY POLICY. THE TIME NEEDED TO TEACH EACH LESSON VARIES FROM ONE TO THREE CLASSROOM PERIODS. ALL TEACHER AND STUDENT MATERIALS ARE INCLUDED. ALSO INCLUDED FOR THE TEACHER'S REFERENCE IS A BRIEF SUMMARY OF PRESIDENT CARTER'S ENERGY POLICY. (AUTHOR/RM)

REPORT NUMBER: HCP/U3841-0003

CONTRACT NUMBER: EX-76C-10-3841

AVAILABILITY: U.S. DEPARTMENT OF ENERGY, TECHNICAL INFORMATION OFFICE, P.O. BOX 62, OAK RIDGE, TENNESSEE 37830 (FREE, PAPER COVER)

INSTITUTION NAME: NATIONAL SCIENCE TEACHERS ASSOCIATION, WASHINGTON, D.C.

SPONSORING AGENCY NAME: OFFICE OF THE ASSISTANT SECRETARY FOR INTERGOVERNMENTAL AND INSTITUTIONAL RELATIONS (DOE), WASHINGTON, D.C. EDUCATION, BUSINESS AND LABOR AFFAIRS.

ACCESSION NUMBER: ED157842

CLEARINGHOUSE ACCESSION NUMBER: SO011055

PUBLICATION DATE: 77

TITLE: ENERGY: THE ULTIMATE RESOURCE? RESOURCE PAPERS FOR COLLEGE GEOGRAPHY, NO. 77-4.

PERSONAL AUTHOR: COOK, EARL

INSTITUTION CODE: 88005071

DESCRIPTOR: BIBLIOGRAPHIES; CONSERVATION EDUCATION; DEPLETED RESOURCES; *ENERGY; *ENERGY CONSERVATION; *ENVIRONMENTAL EDUCATION; FUEL CONSUMPTION; *GEOGRAPHY; HIGHER EDUCATION; INSTRUCTIONAL MATERIALS; NATURAL RESOURCES; RESOURCE MATERIALS; STATISTICAL DATA

EDRS PRICE: EDRS PRICE MF-$0.83 PLUS POSTAGE. HC NOT AVAILABLE FROM EDRS.

DESCRIPTIVE NOTE: 42P.

ISSUE: RIEDEC78

ABSTRACT: THIS PAPER, INTENDED FOR INSTRUCTORS AND STUDENTS IN UNDERGRADUATE COURSES IN GEOGRAPHY AND ENVIRONMENTAL STUDIES, DISCUSSES THE SIGNIFICANCE OF ENERGY TO OUR LIFE AND OUR LIFE-STYLES. THE DOCUMENT IS DESIGNED TO BE USED IN A VARIETY OF WAYS--AS BACKGROUND READING FOR A MINI-CONFERENCE ON ENERGY LEGISLATION AND THE GEOGRAPHIC PROBLEMS THAT ARE INVOLVED; AS A SUBSTITUTE FOR THE TRADITIONAL TEXT MATERIAL; AS AN EXAMPLE OF DIFFERING METHODOLOGICAL APPROACHES TO THE TOPIC; OR AS REQUIRED OUTSIDE READING. THERE ARE FIVE PARTS. PART I DISCUSSES THE SOLAR ENERGY BASE OF LIFE, CONCEPTS OF EFFICIENCY IN AGRICULTURE, AND THE ROLE OF LIVESTOCK. PART II TREATS RENEWABLE AND NONRENEWABLE RESOURCES, DEPLETION AND ESTIMATION OF RESERVES, COAL AND NUCLEAR FUELS, SOLAR ENERGY, WATER POWER, BIOMASS FUELS, WIND POWER, AND GEOTHERMAL ENERGY. THE BENEFITS AND COSTS OF ENERGY USE ARE EXAMINED IN PART III. PART IV DISCUSSES ENERGY CONSERVATION AND DISTRIBUTION AND THE POLITICS INVOLVED. AN ANNOTATED LISTING OF SOURCES OF STATISTICAL INFORMATION IS PROVIDED IN PART V. A BIBLIOGRAPHY CITING RESOURCES RELEVANT TO EACH PART IS ALSO INCLUDED. (AUTHOR/RM)

AVAILABILITY: ASSOCIATION OF AMERICAN GEOGRAPHERS, 1710 SIXTEENTH STREET, N.W., WASHINGTON, D.C. 20009 ($2.50, PAPER COVER)

INSTITUTION NAME: ASSOCIATION OF AMERICAN GEOGRAPHERS, WASHINGTON, D.C. COMMISSION ON COLLEGE GEOGRAPHY.

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*BOARD OF EDUCATION ROLE	(1)	ED116331*
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CLASSROOM RESEARCH	(1)	ED151946						
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CONSERVATION EDUCATION	(43)	ED097212 ED099188 ED099199 ED099200 ED099236 ED101959 ED103213 ED103214 ED104658# ED104670# ED119457# ED121569 ED123035# ED125849 ED125866 ED125885 ED127115 ED129677 ED130821 ED130822 ED130831 ED133162 ED133899 ED134442 ED134454 ED134472 ED141065# ED141066# ED141067# ED143593 ED144789 ED144828 ED146042 ED147187 ED148561 ED148600 ED148609 ED148610 ED148611 ED149797 ED149963 ED157765 ED157842
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DEATH	(1)	ED153893
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*DEPARTMENT OF ENERGY	(1)	ED156466
*DEPLETED RESOURCES	(7)	ED100069 ED118363 ED125858 ED125859 ED147217 ED153938 ED156566
DEPLETED RESOURCES	(17) ED125850 ED153893	ED088181 ED093765 ED099236 ED104670 ED123435 ED123852 ED125849 ED125863 ED133631 ED139670 ED142794 ED144261 ED150046 ED151946 ED157842
DESIGN BUILD APPROACH	(1)	ED096733
*DESIGN NEEDS	(3)	ED096747 ED130448 ED146695
DESIGN NEEDS	(4)	ED074694 ED144249 ED146702 ED147109
*DESIGN TECHNOLOGY	(1)	ED096747
*DEVELOPED NATIONS	(1)	ED117012
DEVELOPED NATIONS	(4)	ED066258 ED150078 ED153326 ED156566
*DEVELOPING NATIONS	(5)	ED066258 ED117012 ED123033 ED150046 ED153326
DEVELOPING NATIONS	(5)	ED114334 ED128282 ED132084 ED150078 ED156566
*DEVELOPMENT	(1)	ED123033
DEVELOPMENT	(1)	ED129675
*DEVELOPMENTAL PROGRAMS	(1)	ED124369
DEVELOPMENTAL PSYCHOLOGY	(1)	ED100536
*DIFFUSION	(1)	ED098625
*DILEMMAS	(1)	ED091261
*DIRECTORIES	(3)	ED018366 ED119967 ED141186

DIRECTORIES	(2)	ED106120* ED141259
*DISCUSSION PROGRAMS	(1)	ED094977
*DISTRICT OF COLUMBIA	(2)	ED147122 ED157817
DOCTORAL THESES	(3)	ED070570* ED070619* ED086467*
DOCUMENTARIES	(1)	ED074009*
DRIVER EDUCATION	(2)	ED128929 ED150756
*EARTH SCIENCE	(2)	ED130844 ED130846
EARTH SCIENCE	(4)	ED052107 ED110346* ED130847 ED143593
EARTH SCIENCE CURRICULUM PROJECT	(1)	ED070570*
*ECOLOGICAL FACTORS	(5)	ED100069 ED117010 ED125849 ED153893 ED156566
ECOLOGICAL FACTORS	(5)	ED052107 ED114334 ED123035* ED125850* ED157704
*ECOLOGY	(12) ED106213	ED052107 ED064140* ED070649 ED072666* ED096130 ED098096 ED098100 ED114268 ED121570* ED133296 ED153893
ECOLOGY	(19) ED114334 ED148610	ED067273 ED074009* ED074694* ED093590 ED093695* ED099436 ED103214 ED115539 ED115551 ED116979 ED118468 ED132009 ED137068 ED148609 ED148611 ED150120* ED157759
ECONOMICALLY DISADVANTAGED	(2)	ED110256 ED128282
*ECONOMIC CHANGE	(2)	ED114953 ED125859
*ECONOMIC CLIMATE	(1)	ED153938
ECONOMIC CLIMATE	(1)	ED087670*
*ECONOMIC DEVELOPMENT	(7)	ED124356 ED124369 ED133124 ED133126 ED137040 ED149450 ED150046
ECONOMIC DEVELOPMENT	(5)	ED110256 ED116906* ED124426 ED133260 ED153893
ECONOMIC DISADVANTAGEMENT	(2)	ED102058 ED150046
*ECONOMIC EDUCATION	(4)	ED102058 ED117023 ED117024 ED157819
ECONOMIC EDUCATION	(1)	ED153843
*ECONOMIC FACTORS	(5)	ED125860 ED127090 ED153326 ED153893 ED153938
ECONOMIC FACTORS	(10) ED142232	ED066258 ED088719* ED098100 ED117023 ED117024 ED118331 ED124426 ED150078 ED151242
ECONOMIC PROGRESS	(1)	ED153938
*ECONOMIC RESEARCH	(2)	ED124395 ED145586
ECONOMIC RESEARCH	(3)	ED088181 ED095312 ED153034
*ECONOMICS	(12) ED115557	ED075163 ED077704 ED082321 ED089466* ED096154 ED115541 ED115556 ED117023 ED117024 ED129603 ED157704
ECONOMICS	(18) ED116921 ED156454	ED064140* ED099199 ED099200 ED102058 ED103216 ED107517 ED107542 ED134442 ED135637 ED139572 ED151242 ED153841 ED153845 ED156453 ED157720 ED157819
ECONOMIC STATUS	(1)	ED153893
*EDUCABLE MENTALLY HANDICAPPED	(1)	ED101937
*EDUCATION	(1)	ED130301
EDUCATION	(6)	ED074009* ED110256 ED116878* ED124369 ED133440 ED139372
*EDUCATIONAL ADMINISTRATION	(2)	ED116331* ED136325
EDUCATIONAL ADMINISTRATION	(1)	ED136350*
*EDUCATIONAL ALTERNATIVES	(1)	ED151946
EDUCATIONAL ALTERNATIVES	(2)	ED136325 ED151927
*EDUCATIONAL ASSESSMENT	(1)	ED127203
EDUCATIONAL ATTITUDES	(1)	ED116331*
*EDUCATIONAL CHANGE	(1)	ED121570*
EDUCATIONAL COMPLEXES	(1)	ED142135
EDUCATIONAL ECONOMICS	(4)	ED116331* ED143296 ED144460 ED155066
EDUCATIONAL ENVIRONMENT	(1)	ED149487
EDUCATIONAL EQUIPMENT	(1)	ED125071*
*EDUCATIONAL FACILITIES	(13) ED140423	ED078508 ED082321 ED119312 ED120904 ED122363 ED122364 ED125071* ED140424 ED142135 ED144460 ED147998* ED150699
EDUCATIONAL FACILITIES	(5)	ED083674 ED108367 ED128904 ED133909 ED140465*
*EDUCATIONAL FINANCE	(4)	ED116331* ED125099 ED128904 ED141944
EDUCATIONAL FINANCE	(7)	ED086075 ED125071* ED126553 ED137187 ED140423 ED140424 ED144460
*EDUCATIONAL GAMES	(1)	ED123035*
EDUCATIONAL GAMES	(1)	ED151297
*EDUCATIONAL IMPROVEMENT	(2)	ED066258 ED133260
EDUCATIONAL IMPROVEMENT	(1)	ED121570*
EDUCATIONAL INNOVATION	(1)	ED151946
*EDUCATIONAL LEGISLATION	(1)	ED141944
EDUCATIONAL LEGISLATION	(2)	ED140423 ED140424
*EDUCATIONAL NEEDS	(3)	ED137187 ED149144 ED155048
EDUCATIONAL NEEDS	(2)	ED094474 ED109447
*EDUCATIONAL OBJECTIVES	(3)	ED133260 ED133831 ED151927
EDUCATIONAL OBJECTIVES	(5)	ED120341 ED129675 ED134452 ED147464 ED150273

*EDUCATIONAL OPPORTUNITIES	(1)	ED0183660						
*EDUCATIONAL PLANNING	(2)	ED125071*	ED133909					
EDUCATIONAL PLANNING	(1)	ED150699						
EDUCATIONAL PRACTICE	(1)	ED149144						
*EDUCATIONAL PROBLEMS	(1)	ED103216						
EDUCATIONAL PROBLEMS	(1)	ED137187						
*EDUCATIONAL PROGRAMS	(75)	ED0183660	ED103216	ED106120*	ED144701	ED144702	ED147114	ED147115
	ED147116	ED147117	ED147118	ED147119	ED147120	ED147121	ED147122	ED147123
	ED147124	ED147125	ED147126	ED147127	ED147128	ED147129	ED147130	ED147131
	ED147132	ED147133	ED147134	ED147135	ED147136	ED147137	ED147138	ED147139
	ED147140	ED147141	ED147142	ED147143	ED147144	ED147145	ED147146	ED147147
	ED147148	ED147149	ED147150	ED147151	ED147152	ED147153	ED147154	ED147155
	ED147156	ED147157	ED147158	ED147159	ED147160	ED147161	ED147162	ED147163
	ED147164	ED147165	ED147166	ED147167	ED147168	ED147169	ED147170	ED147171
	ED147172	ED147173	ED147174	ED147175	ED147176	ED147177	ED147178	ED147179
	ED147180	ED147181	ED147182	ED150466				
EDUCATIONAL PROGRAMS	(4)	ED099236	ED103214	ED133196	ED137040			
*EDUCATIONAL RADIO	(1)	ED093695*						
*EDUCATIONAL RESEARCH	(7)	ED127203	ED140011	ED141069	ED144789	ED148593	ED148609	ED148610
EDUCATIONAL RESEARCH	(4)	ED086467*	ED135664	ED143400	ED155066			
*EDUCATIONAL RESOURCES	(1)	ED156463						
*EDUCATIONAL RESPONSIBILITY	(2)	ED149144	ED156466					
EDUCATIONAL RESPONSIBILITY	(1)	ED133440						
*EDUCATIONAL SPECIFICATIONS	(1)	ED149487						
EDUCATIONAL SPECIFICATIONS	(1)	ED150699						
EDUCATIONAL STRATEGIES	(1)	ED151946						
EDUCATIONAL TRENDS	(1)	ED133260						
*EFFICIENCY	(4)	ED088184	ED088185	ED122676	ED154507			
EFFICIENCY	(2)	ED106013	ED141955					
*ELECTRICAL APPLIANCES	(1)	ED088184						
ELECTRICAL APPLIANCES	(1)	ED157726						
ELECTRICAL OCCUPATIONS	(1)	ED130117						
ELECTRICAL PRODUCTION	(1)	ED097212						
*ELECTRICAL SYSTEMS	(3)	ED130437	ED132025	ED132026				
ELECTRICAL SYSTEMS	(3)	ED078508	ED096747	ED100003				
*ELECTRIC BATTERIES	(1)	ED130844						
*ELECTRICITY	(7)	ED041747	ED059101*	ED069551*	ED075163	ED095965	ED128908	ED152530
ELECTRICITY	(13)	ED029468*	ED065296	ED093765	ED097212	ED099962	ED107521	ED107522
	ED107523	ED107809	ED115478*	ED119312	ED134417	ED153859		
*ELECTRIC POWER GENERATION	(2)	ED099199	ED099200					
ELECTRIC UTILITIES	(1)	ED119970						
ELECTROMECHANICAL TECHNOLOGY	(1)	ED120543						
*ELECTRONIC DATA PROCESSING	(1)	ED115857						
ELECTRONICS	(1)	ED107521						
*ELEMENTARY EDUCATION	(13)	ED130821	ED141065*	ED141066*	ED146044	ED146045	ED146046	ED146047
	ED146048	ED149980	ED153819	ED153859	ED153872*	ED157759		
ELEMENTARY EDUCATION	(18)	ED085316	ED100003	ED111662	ED111663	ED111664	ED117858	ED127160
	ED127203	ED147217	ED147581	ED147582	ED149979	ED152529	ED152530	ED152531
	ED152532	ED153845	ED153846					
*ELEMENTARY GRADES	(3)	ED093649	ED103213	ED114268				
ELEMENTARY GRADES	(1)	ED093765						
*ELEMENTARY SCHOOL CURRICULUM	(1)	ED147581						
ELEMENTARY SCHOOL CURRICULUM	(3)	ED050063	ED147217	ED147582				
ELEMENTARY SCHOOLS	(3)	ED077088	ED094474	ED096733				
*ELEMENTARY SCHOOL SCIENCE	(15)	ED020112*	ED020113*	ED050063	ED058860*	ED089993	ED111662	ED111663
	ED111664	ED127160	ED132009	ED134452	ED152529	ED152530	ED152531	ED152532
ELEMENTARY SCHOOL SCIENCE	(9)	ED059896	ED107519	ED133192	ED133193	ED133194	ED133195	ED133196
	ED153846	ED155018						
ELEMENTARY SCHOOL TEACHERS	(1)	ED0183660						
*ELEMENTARY SECONDARY EDUCATION	(20)	ED119957*	ED121569	ED125885	ED127113	ED133192	ED133193	ED133194
	ED133195	ED133196	ED133223	ED134442	ED134445	ED134452	ED149987	ED153820
	ED156463	ED156474	ED157681	ED157683	ED157761			
ELEMENTARY SECONDARY EDUCATION	(47)	ED100069	ED106070	ED106213	ED116331*	ED122363	ED122364	ED125076
	ED125099	ED126553	ED128904	ED128908	ED129605	ED129677	ED130301	ED130397
	ED130833	ED130949	ED133296	ED133831	ED133873	ED133899	ED133967	ED133969
	ED133918	ED136325	ED136350*	ED137187	ED140011	ED140423	ED140424	ED141259
	ED141944	ED141955	ED144240*	ED144261	ED144826	ED147990*	ED149956	ED149987
	ED150699	ED150755	ED150756	ED151927	ED151946	ED152773	ED154507	ED157817
ELEMENTARY SECONDARY EDUCATION ACT TITLE III	(21)	ED093590	ED093649	ED097212	ED101937	ED124387	ED125890	ED130821
	ED130822	ED130831	ED132004	ED132009	ED133162	ED133223	ED133228	ED133229
	ED134445	ED134452	ED149979	ED149980	ED149987	ED149994		
ELEMENTARY SECONDARY EDUCATION ACT TITLE V	(3)	ED122363	ED122364	ED128929				
*EMERGENCY ASSISTANCE FOR SCHOOLS ACT	(1)	ED141944						
*EMERGENCY EDUCATIONAL ASSISTANCE ACT	(2)	ED140423	ED140424					

*EMERGENCY PROGRAMS	(2)	ED151927	ED151946				
EMPLOYER ATTITUDES	(1)	ED152385					
*EMPLOYMENT	(1)	ED095312					
EMPLOYMENT	(5)	ED110256	ED122756	ED133126	ED150046	ED153034	
EMPLOYMENT LEVEL	(1)	ED120416					
*EMPLOYMENT OPPORTUNITIES	(1)	ED142794					
EMPLOYMENT OPPORTUNITIES	(2)	ED109447	ED109448				
*EMPLOYMENT PATTERNS	(1)	ED095312					
EMPLOYMENT PATTERNS	(1)	ED109448					
EMPLOYMENT PROBLEMS	(1)	ED153034					
*EMPLOYMENT PROJECTIONS	(5)	ED114538	ED120416	ED127414P	ED142794	ED153034	
EMPLOYMENT PROJECTIONS	(2)	ED109447	ED109448				
*EMPLOYMENT QUALIFICATIONS	(1)	ED119970					
EMPLOYMENT SERVICES	(1)	ED134233					
*EMPLOYMENT STATISTICS	(1)	ED095312					
EMPLOYMENT STATISTICS	(2)	ED114538	ED120416				
*EMPLOYMENT TRENDS	(1)	ED120416					
EMPLOYMENT TRENDS	(4)	ED109447	ED114538	ED119970	ED124369		
*ENERGY	(1199)	ED020112P	ED020113P	ED028631	ED029468P	ED040866	ED050063	ED054968
ED054969	ED055814	ED056800P	ED059101P	ED061083P	ED064096	ED065296	ED067273
ED067303	ED069350P	ED069551P	ED070604	ED070607	ED070649	ED071895	ED072444P
ED074699P	ED075163	ED075230	ED077704	ED082974	ED083013P	ED083674	ED085316
ED086075	ED087670P	ED087179P	ED089944P	ED089993	ED091171	ED092376	ED092395
ED093649	ED093656	ED093697	ED094474	ED095020	ED095024	ED096154	ED097212
ED098625	ED099199	ED099200	ED100536	ED101937	ED101959	ED103216	ED104458P
ED104670P	ED105845P	ED106070	ED107517	ED107518	ED107540	ED107521	ED107542
ED107523	ED108891	ED111662	ED111663	ED111664	ED114270P	ED114272P	ED114534
ED115478P	ED115541	ED115551	ED115557	ED115857	ED116920P	ED119954	ED119957P
ED119967P	ED119970	ED120543	ED120884	ED121549	ED123033	ED123035P	ED123052
ED123695	ED123728	ED125703	ED125849	ED125865	ED127090	ED127166	ED127181
ED127263	ED127414P	ED129602	ED129603	ED129677	ED130833	ED130844	ED130845
ED130846	ED130847	ED130878	ED132004	ED132009	ED132024	ED132025	ED132026
ED132084	ED133162	ED133172	ED133173	ED133192	ED133193	ED133194	ED133195
ED133196	ED133228	ED133229	ED133873	ED134411	ED134416	ED134417	ED134422
ED134426	ED134442	ED134445	ED134450	ED134472	ED135617	ED135664	ED137088
ED137075	ED137100	ED139670	ED139967	ED141065P	ED141066P	ED141467P	ED141129
ED141163	ED141164	ED141165	ED141186	ED141187	ED141217	ED142318	ED144424
ED143593	ED144440	ED146059	ED146933	ED147217	ED147404	ED148640	ED148669
ED148810	ED148811	ED149144	ED149963	ED149987	ED150644	ED151142	ED151242
ED151297	ED152385	ED152529	ED152530	ED152531	ED152532	ED153034	ED153325
ED153819	ED153820	ED153821	ED153841	ED153842	ED153843	ED153844	ED153845
ED153846	ED153859	ED155017P	ED155018	ED156046	ED156047	ED156429	ED156474
ED157704	ED157744	ED157761	ED157817	ED157818	ED157819	ED157820	ED157842
ENERGY	(180)	ED041747	ED042649	ED052059	ED055810	ED064139P	ED064140P	ED064150
ED066258	ED071894	ED074099P	ED077088	ED078508	ED079027	ED093590	ED093695P
ED093765	ED094977	ED096130	ED098044	ED098112	ED099188	ED099236	ED102058
ED103214	ED106120P	ED106213	ED107495P	ED107809	ED108881	ED109447	ED110256
ED110340P	ED112001	ED114334	ED115847	ED115954	ED116921	ED116922	ED116979
ED117010	ED117012	ED117023	ED117024	ED118331	ED118363P	ED118451P	ED119952
ED119963	ED119992	ED120009	ED120341	ED120410	ED121570P	ED121580	ED122756
ED123042P	ED124356	ED124369	ED124387	ED125850P	ED125858	ED125860	ED125863
ED125864	ED125885	ED126986P	ED127343	ED129626	ED129675	ED130117	ED130844
ED131539	ED133124	ED133223	ED133260	ED133296	ED133440	ED134256	ED137040
ED138572	ED140011	ED141069	ED141121	ED141193	ED141944	ED142232	ED142422
ED144044	ED146045	ED146046	ED146047	ED146048	ED147108	ED147109	ED147114
ED147115	ED147116	ED147117	ED147118	ED147119	ED147120	ED147121	ED147122
ED147123	ED147124	ED147125	ED147126	ED147127	ED147128	ED147129	ED147130
ED147131	ED147132	ED147133	ED147134	ED147135	ED147136	ED147137	ED147138
ED147139	ED147140	ED147141	ED147142	ED147143	ED147144	ED147145	ED147146
ED147147	ED147148	ED147149	ED147150	ED147151	ED147152	ED147153	ED147154
ED147155	ED147156	ED147157	ED147158	ED147159	ED147160	ED147161	ED147162
ED147163	ED147164	ED147165	ED147166	ED147167	ED147168	ED147169	ED147170
ED147171	ED147172	ED147173	ED147174	ED147175	ED147176	ED147177	ED147178
ED147179	ED147180	ED147181	ED147182	ED148593	ED149994	ED152535	ED153871P
ED153872P	ED153893	ED153938	ED154996	ED154999	ED156453	ED156454	ED156466
ED156566	ED157726	ED157759	ED157765	ED157782			
*ENERGY ABSTRACTS FOR POLICY ANALYSIS	(1)	ED146933					
*ENERGY AUDIT	(1)	ED122364					
*ENERGY CONSERVATION	(1150)	ED082321	ED088181	ED088183	ED088184	ED088185	ED088203	ED088258
ED091261	ED091283	ED092418	ED093765	ED094474	ED094477	ED095965	ED096733
ED096747	ED099962	ED100003	ED100004	ED100005	ED100006	ED100007	ED100069
ED102715	ED105845P	ED106013	ED108367	ED108891	ED109447	ED114270P	ED114920P
ED117858	ED118363P	ED119312	ED119320	ED119375	ED119967P	ED119992	ED120894
ED120898	ED120904	ED120967	ED122363	ED122364	ED122440	ED122676	ED123035P
ED123076	ED125099	ED125703	ED125844	ED125858	ED125863	ED125866	ED125885
ED126353	ED127109	ED127160	ED127161	ED127243	ED127731	ED128904	ED128908
ED128929	ED130397	ED130448	ED130821	ED130822	ED130831	ED130845	ED131539
ED131552	ED132707	ED133172	ED133173	ED133831	ED133899	ED133918	ED136350P
ED137088	ED140423	ED140424	ED140465P	ED140508	ED140510	ED141129	ED141164
ED141459	ED141935	ED142135	ED142423	ED142794	ED143296	ED143400	ED143593
ED144249P	ED144249	ED144264	ED144444	ED144789	ED144848	ED145588	ED146042
ED146044	ED146045	ED146046	ED146047	ED146048	ED146695	ED147108	ED147109
ED147187	ED147217	ED147998P	ED148600	ED148609	ED148610	ED148611	ED149144
ED149797	ED149994	ED150699	ED150755	ED150756	ED151297	ED151927	ED152535
ED152773	ED153840	ED153841	ED153871P	ED153872P	ED154326	ED154507	ED154998
ED154999	ED155758	ED156429	ED156453	ED156454	ED156466	ED156474	ED157681
ED157720	ED157726	ED157782	ED157785	ED157817	ED157820	ED157842	
ENERGY CONSERVATION	(661)	ED088179P	ED095312	ED098100	ED101937	ED103213	ED105552	ED106025
ED109448	ED114208	ED114538	ED115539	ED116331P	ED116878P	ED116900P	ED118468
ED119970	ED121569	ED125071P	ED125859	ED125890	ED126594	ED127115	ED127414P
ED128282	ED129675	ED129677	ED130301	ED130437	ED130949	ED131597	ED132024
ED132025	ED132026	ED133873	ED133907	ED133909	ED134233	ED134452	ED136325
ED136443	ED137187	ED141187	ED141217	ED141944	ED142424	ED144826	ED145595
ED146059	ED146693	ED146694	ED146701	ED146702	ED147188	ED147581	ED147582
ED147587	ED149487	ED150046	ED153326	ED153819	ED153893	ED153938	ED155018
ED156463	ED157744	ED157818					
*ENERGY CONSUMPTION	(1)	ED078508					
*ENERGY CRISIS	(5)	ED088203	ED088179P	ED109447	ED109448	ED120894	
ENERGY CRISIS	(2)	ED093765	ED095312				
ENERGY DEVELOPMENT	(1)	ED109448					

*ENERGY EDUCATION	(3)	ED154996	ED157726	ED157782				
*ENERGY PRODUCTION	(1)	ED133126						
*ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION	(5)	ED129603	ED129605	ED129606	ED132024	ED144828		
ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION	(2)	ED129602	ED141187					
ENERGY SOURCES	(1)	ED123052						
*ENERGYTAX SIMULATION MODEL	(1)	ED149450						
*ENERGY TECHNOLOGY	(1)	ED125703						
ENERGY TECHNOLOGY	(1)	ED149144						
ENERGY USE	(1)	ED116920*						
ENGINEERING	(4)	ED0183660	ED105552	ED125849	ED131997			
*ENGINEERING EDUCATION	(3)	ED116952	ED118451*	ED119970				
ENGINEERING EDUCATION	(1)	ED130849						
ENGINEERING GRAPHICS	(1)	ED119320						
ENGINEERING TECHNOLOGY	(1)	ED132707						
*ENGINEERS	(2)	ED114538	ED151142					
ENGINES	(1)	ED120543						
*ENROLLMENT TRENDS	(1)	ED125076						
ENROLLMENT TRENDS	(2)	ED116331*	ED125703					
*ENVIRONMENT	(41)	ED052699	ED074694*	ED075103	ED075230	ED077704	ED089944*	ED095020
	ED096154	ED097212	ED103214	ED107924	ED108881	ED114270*	ED115439	ED115539
	ED115547	ED116920*	ED116921	ED116979	ED119953	ED120009	ED125856	ED125860
	ED125865	ED125890	ED130847	ED130848	ED134009	ED134024	ED133173	ED133213
	ED133223	ED133228	ED133229	ED135664	ED137075	ED141165	ED142423	ED149983
	ED155012*	ED156429						
ENVIRONMENT	(101)	ED070649	ED082974	ED093590	ED093695*	ED103216	ED104639*	ED106706
	ED107518	ED119967*	ED121576*	ED124426	ED125858	ED127169	ED130845	ED133064
	ED133164	ED134416	ED137068	ED139372	ED139670	ED141693*	ED141066*	ED141067*
	ED141121	ED141163	ED141187	ED142424	ED147114	ED147115	ED147116	ED147117
	ED147118	ED147119	ED147120	ED147121	ED147122	ED147123	ED147124	ED147125
	ED147126	ED147127	ED147128	ED147129	ED147130	ED147131	ED147132	ED147133
	ED147134	ED147135	ED147136	ED147137	ED147138	ED147139	ED147140	ED147141
	ED147142	ED147143	ED147144	ED147145	ED147146	ED147147	ED147148	ED147149
	ED147150	ED147151	ED147152	ED147153	ED147154	ED147155	ED147156	ED147157
	ED147158	ED147159	ED147160	ED147161	ED147162	ED147163	ED147164	ED147165
	ED147166	ED147167	ED147168	ED147169	ED147170	ED147171	ED147172	ED147173
	ED147174	ED147175	ED147176	ED147177	ED147178	ED147179	ED147180	ED147181
	ED147182	ED148593	ED148600	ED153842	ED153845	ED156566		
*ENVIRONMENTAL CRITERIA	(1)	ED137068						
ENVIRONMENTAL CRITERIA	(6)	ED115547	ED116979	ED125071*	ED133260	ED152535	ED157789	
*ENVIRONMENTAL EDUCATION	(102)	ED044140*	ED065296	ED067273	ED088719*	ED089993	ED091171	ED091261
	ED092376	ED092395	ED092418	ED093590	ED093649	ED093695*	ED093697	ED093765
	ED094977	ED097212	ED098496	ED098100	ED099188	ED099199	ED099200	ED099234
	ED101937	ED101948	ED103213	ED104070*	ED106070	ED106413	ED107495*	ED114274*
	ED114384	ED115267	ED115531	ED115534	ED115557	ED116400*	ED120049	ED121569
	ED121570*	ED123035*	ED123042*	ED125849	ED125863	ED125885	ED127115	ED127263
	ED127731	ED129677	ED130821	ED130822	ED130831	ED132004	ED132009	ED132409
	ED132084	ED133162	ED133223	ED133229	ED133296	ED134442	ED135664	ED141065*
	ED141066*	ED141184	ED141217	ED141259	ED142391*	ED142993	ED144261	ED144789
	ED144828	ED144828	ED146042	ED147108	ED147109	ED147187	ED147188	ED147587
	ED148561	ED148609	ED148610	ED148611	ED149979	ED149980	ED149987	ED149996
	ED152529	ED152530	ED152531	ED152532	ED153819	ED154996	ED154999	ED155018
	ED156463	ED157681	ED157683	ED157704	ED157759	ED157765	ED157842	
ENVIRONMENTAL EDUCATION	(44)	ED067303	ED070606	ED070607	ED087670*	ED103216	ED104658*	ED108891
	ED111442	ED111443	ED111644	ED115541	ED116952	ED116979	ED118363*	ED119952
	ED119957*	ED119992	ED123052	ED125864	ED125866	ED129603	ED133428	ED139967
	ED141067*	ED142600	ED142044	ED142045	ED142046	ED142047	ED142048	ED147581
	ED147582	ED151297	ED152535	ED153820	ED153821	ED153844	ED153846	ED153871*
	ED153872*	ED156453	ED157720	ED157744	ED157761			
ENVIRONMENTAL ENERGY EDUCATION PROJECT	(4)	ED147108	ED147109	ED147187	ED147188			
*ENVIRONMENTAL INFLUENCES	(4)	ED064139*	ED116979	ED117010	ED139670			
ENVIRONMENTAL INFLUENCES	(23)	ED059101*	ED065296	ED067303	ED074694*	ED075163	ED083013*	ED088256
	ED093590	ED099199	ED099200	ED114270*	ED115439	ED115539	ED115551	ED116331
	ED125859	ED128282	ED129526	ED133296	ED141217	ED144249	ED144828	ED150755
ENVIRONMENTAL PROTECTION AGENCY	(1)	ED152535						
*ENVIRONMENTAL RESEARCH	(6)	ED052107	ED086075	ED103216	ED115539	ED115547	ED146693	
ENVIRONMENTAL RESEARCH	(8)	ED074694*	ED103214	ED105845*	ED114272*	ED116979	ED118468	ED144828
	ED152535							
ENVIRONMENTAL TECHNICIANS	(2)	ED143400	ED149797					
EQUIPMENT	(3)	ED130443	ED145586	ED145595				
*EQUIPMENT EVALUATION	(1)	ED077088						
EQUIPMENT EVALUATION	(1)	ED088184						
*EQUIPMENT MAINTENANCE	(2)	ED122363	ED130437					
EQUIPMENT MAINTENANCE	(9)	ED077088	ED082321	ED100003	ED120967	ED122364	ED122440	ED128929
	ED144240*	ED150736						
*EQUIPMENT STANDARDS	(1)	ED088184						
EQUIPMENT STANDARDS	(3)	ED119320	ED131531	ED146702				
EQUIPMENT UTILIZATION	(1)	ED076747						
ERDA	(6)	ED129602	ED129603	ED129605	ED129606	ED132024	ED141187	
ESEA TITLE III	(18)	ED067303	ED093590	ED093695	ED097212	ED101937	ED124387	ED125890
	ED130821	ED130822	ED130831	ED132004	ED132009	ED133162	ED133223	ED133228
	ED133229	ED134445	ED134452					
ESEA TITLE V	(3)	ED122363	ED122364	ED128929				
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*EVALUATION	(6)	ED032230 ED125865 ED125866 ED140508 ED142391 ED146933
EVALUATION	(5)	ED064150 ED106025 ED127203 ED133223 ED150046
EVALUATION METHODS	(1)	ED146694
*EXCEPTIONAL CHILD EDUCATION	(1)	ED088258
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*EXPENDITURES	(1)	ED133909
EXPENDITURES	(3)	ED122676 ED128904 ED143296
*EXPERIENTIAL LEARNING	(2)	ED153820 ED154996
EXPERIMENTAL PROGRAMS	(1)	ED003207
*EXPERIMENTS	(4)	ED100003 ED100004 ED100007 ED136443
EXPERIMENTS	(4)	ED056860 ED100005 ED100006 ED119320
EXTENSION AGENTS	(1)	ED108881
EXTENSION EDUCATION	(1)	ED108881
EXTRACTIVE INDUSTRIES	(1)	ED133126
*FACILITIES	(1)	ED134417
FACILITIES	(1)	ED114272
*FACILITY CASE STUDIES	(2)	ED099962 ED131552
FACILITY CASE STUDIES	(5)	ED114920 ED119320 ED125071 ED125076 ED131539
*FACILITY GUIDELINES	(7)	ED078508 ED088183 ED114920 ED120967 ED125071 ED133918 ED149487
FACILITY GUIDELINES	(5)	ED099962 ED119320 ED120896 ED131539 ED131552
FACILITY INVENTORY	(2)	ED125071 ED150099
*FACILITY PLANNING	(1)	ED120896
FACILITY PLANNING	(4)	ED078508 ED082321 ED122676 ED125071
*FACILITY REQUIREMENTS	(7)	ED028631 ED120967 ED125071 ED133907 ED133918 ED144249 ED149487
FACILITY REQUIREMENTS	(4)	ED114920 ED120896 ED140508 ED144460
FACILITY UTILIZATION RESEARCH	(2)	ED114920 ED147966
FAMILY CHARACTERISTICS	(1)	ED141193
FAMILY ENVIRONMENT	(1)	ED146042
FAMILY PLANNING	(2)	ED114334 ED128282
*FAMILY PROBLEMS	(1)	ED154326
FAMILY ROLE	(1)	ED141193
*FAMILY (SOCIOLOGICAL UNIT)	(2)	ED141193 ED154326
*FEASIBILITY STUDIES	(2)	ED100005 ED100006
FEASIBILITY STUDIES	(1)	ED100004
*FEDERAL AID	(5)	ED128904 ED130849 ED140423 ED140424 ED141944
FEDERAL AID	(1)	ED152385
*FEDERAL GOVERNMENT	(3)	ED095020 ED116921 ED118331
FEDERAL GOVERNMENT	(10)	ED075163 ED077704 ED089946 ED094474 ED133124 ED140423 ED140424 ED141944 ED148593 ED149144
*FEDERAL LEGISLATION	(6)	ED030459 ED133124 ED140423 ED140424 ED141944 ED147172
FEDERAL LEGISLATION	(4)	ED116921 ED127109 ED133899 ED153842
*FEDERAL PROGRAMS	(3)	ED133172 ED141129 ED156466
FEDERAL PROGRAMS	(5)	ED105552 ED105845 ED106013 ED134450 ED141459
*FEDERAL REGULATION	(1)	ED155758
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*FIELD TRIPS	(1)	ED134417
*FILMS	(4)	ED074009 ED129602 ED133193 ED133194
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*FINANCIAL PROBLEMS	(1)	ED094474
*FINANCIAL SUPPORT	(2)	ED018366 ED147108
FINANCIAL SUPPORT	(5)	ED130849 ED140011 ED149487 ED150078 ED152385
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*FLORIDA	(2)	ED147123 ED157761
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*FOOD	(5)	ED064139 ED106013 ED117010 ED140510 ED153841
FOOD	(13)	ED072666 ED074009 ED098112 ED106025 ED114334 ED118331 ED128282

	ED129675	ED137187	ED142422	ED153326	ED153893	ED153938		
*FOOD HANDLING FACILITIES	(1)	ED140510						
FOOD HANDLING FACILITIES	(1)	ED130437						
FOOD SERVICE	(2)	ED100069	ED133909					
*FOOD SERVICE INDUSTRY	(1)	ED140510						
FOOD SERVICE INDUSTRY	(1)	ED155048						
FOODS INSTRUCTION	(1)	ED130949						
FOOD STANDARDS	(1)	ED140510						
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*FUEL CONSUMPTION	(26) ED006733 ED130397 ED144042	ED067303 ED100049 ED133873 ED150756	ED078508 ED108367 ED133907 ED157720	ED088181 ED120894 ED140465	ED088183 ED122440 ED141944	ED088185 ED124426 ED142135	ED094474 ED127109 ED143296	ED095985 ED128929 ED144460
FUEL CONSUMPTION	(39) ED100004 ED120964 ED125883 ED144261	ED091018 ED100005 ED120967 ED125885 ED145586	ED088184 ED100066 ED122363 ED126904 ED145595	ED088203 ED100067 ED122364 ED130448 ED147968	ED094477 ED101958 ED122676 ED133899 ED150755	ED095312 ED102715 ED125099 ED140423 ED153893	ED099962 ED103216 ED125849 ED140424 ED156566	ED100003 ED104670 ED126258 ED141935 ED157842
*FUELS	(7)	ED093765	ED107517	ED119970	ED124395	ED124426	ED125860	ED157744
FUELS	(18) ED127414 ED130046	ED075163 ED132025 ED157704	ED082976 ED139670 ED157726	ED095020 ED140465	ED099199 ED141187	ED099200 ED142135	ED116952 ED144261	ED127109 ED145586
*FUNDAMENTAL CONCEPTS	(1)	ED133296						
*FUTURES (OF SOCIETY)	(11) ED142422	ED074009 ED150046	ED093765 ED151242	ED098112 ED156429	ED110256	ED128282	ED137187	ED139670
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*GASOLINE	(1)	ED127109						
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*GENERAL SCIENCE	(1)	ED130846						
GENERAL SCIENCE	(6)	ED127160	ED129602	ED130844	ED130845	ED130847	ED130848	
*GENETICS	(1)	ED052938						
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GEOGRAPHIC REGIONS	(1)	ED052107						
*GEOGRAPHY	(2)	ED118468	ED157842					
GEOGRAPHY	(6)	ED052107	ED1103468	ED115556	ED115557	ED132084	ED143593	
*GEOLOGY	(1)	ED042649						
*GEORGIA	(1)	ED147124						
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*GEOTHERMAL ENERGY	(1)	ED130846						
*GHANA (ACCRA)	(1)	ED157817						
*GLOBAL APPROACH	(9) ED156566	ED098112 ED157819	ED128282	ED129675	ED137187	ED150046	ED150078	ED153938
GLOBAL APPROACH	(5)	ED106025	ED118331	ED133260	ED133296	ED153893		
*GLOSSARIES	(2)	ED155012	ED157744					
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GOVERNMENT PUBLICATIONS	(3)	ED119953	ED132024	ED139372				
*GOVERNMENT ROLE	(2)	ED132024	ED135637					
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*GRADE 1	(1)	ED153846						
GRADE 1	(2)	ED050063	ED132009					
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*GRADE 9	(1)	ED107495*
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*GRAPHS	(1)	ED124395
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*GROWTH PATTERNS	(1)	ED100536
*GUIDELINES	(8)	ED088258 ED116331* ED128908 ED141259 ED142423 ED144240* ED150756 ED155758
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*GUIDES	(2)	ED134417 ED146042
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*HEALTH EDUCATION	(1)	ED130949
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*HEAT	(1)	ED069551*
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*HEATING	(15)	ED028631 ED083674 ED100003 ED100004 ED100007 ED119320 ED122440 ED130397 ED131597 ED136443 ED140423 ED140424 ED140465* ED145586 ED145595
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*HEAT RECOVERY	(1)	ED136443
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*HIGHER EDUCATION	(6)	ED086075 ED114272* ED121580 ED122676 ED135664 ED144460
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*HISTORY	(1)	ED141187
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*HOME ECONOMICS	(1)	ED132004
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*HUMAN DEVELOPMENT	(1)	ED100536
*HUMAN ENGINEERING	(2)	ED144249 ED146693
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*HUMAN GEOGRAPHY	(2)	ED118468 ED133296
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*HUMANIZATION	(1)	ED133260
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*INDUSTRIAL TECHNOLOGY (4) ED123052 ED125703 ED133260 ED133440
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*INDUSTRY (4) ED114538 ED127414 ED139967 ED141121
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*INFORMATION NEEDS (2) ED095020 ED139372
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*INFORMATION NETWORKS (1) ED149717
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*INFORMATION SERVICES (1) ED139372
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*INFORMATION SOURCES (5) ED040866 ED105845 ED119967 ED139372 ED156463
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*INFORMATION TRANSFER (1) ED149717
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*INSTRUCTION (8) ED020112 ED061083 ED069551 ED070619 ED086467 ED092395 ED093697 ED135664
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*INSTRUCTIONAL INNOVATION (1) ED102058
*INSTRUCTIONAL MATERIALS (98) ED013754 ED020113 ED031747 ED034967 ED065296 ED067303 ED070570 ED070619 ED089993 ED093656 ED096130 ED099188 ED099199 ED099200 ED099436 ED104658 ED104670 ED108891 ED110344 ED111662 ED111663 ED112001 ED114268 ED119957 ED120341 ED121569 ED123035 ED123042 ED125885 ED127160 ED129602 ED129606 ED130821 ED130822 ED130831 ED130833 ED130844 ED130845 ED130846 ED130847 ED130848 ED132004 ED132009 ED133162 ED133173 ED133192 ED133193 ED133194 ED133195 ED133196 ED133223 ED133228 ED134442 ED134445 ED137075 ED137100 ED141065 ED147068 ED141067 ED141163 ED141164 ED141165 ED142591

ED144828* ED146044 ED146045 ED146046 ED146047 ED146048 ED146059 ED147188
ED148561 ED149979 ED149980 ED149987 ED149994 ED151297 ED153819 ED153820
ED153821 ED153841 ED153842 ED153843 ED153844 ED153845 ED153859 ED153871*
ED153872* ED155018 ED155066 ED156466 ED156474 ED157681 ED157683 ED157759
ED157765

INSTRUCTIONAL MATERIALS (46) ED042649 ED054966 ED054968 ED054969 ED055810 ED064094* ED067273
ED069551* ED071894 ED071895 ED079027 ED085316 ED093649 ED093697 ED093765
ED095024 ED097212 ED101937 ED101959 ED107495* ED111064 ED117023 ED117025
ED119992 ED120009 ED121580 ED124387 ED127161 ED127243 ED129675 ED130117
ED132025 ED132084 ED133229 ED144789 ED146042 ED147187 ED149963 ED150755
ED152529 ED152530 ED152531 ED152532 ED157744 ED157782 ED157842

INSTRUCTIONAL MATERIALS CENTERS (1) ED133918

INSTRUMENTATION (2) ED136443 ED146693

*INSULATION (1) ED157785

INSULATION (1) ED120967

INTEGRATED CURRICULUM (5) ED064094 ED134422 ED134424 ED134426 ED153842

INTEGRATED CURRICULUM (6) ED107809 ED120341 ED134452 ED153841 ED153843 ED153859

INTELLECTUAL DISCIPLINES (1) ED151242

INTERACTION OF MAN AND THE BIOSPHERE (1) ED070570*

INTERACTION OF MATTER AND ENERGY (3) ED032230 ED070570* ED086467*

INTERACTIVE COMPUTER SYSTEMS (1) ED126946*

INTERDISCIPLINARY APPROACH (12) ED092376 ED093590 ED099188 ED129675 ED133296 ED141067 ED153820
ED153821 ED153871* ED153872* ED157683 ED157818

INTERDISCIPLINARY APPROACH (35) ED052107 ED064094* ED075230 ED085316 ED091283 ED098096 ED098100
ED099199 ED099200 ED099236 ED100536 ED101959 ED104670* ED106070 ED107495*
ED111604 ED114268 ED116979 ED130821 ED130822 ED130831 ED130833 ED133831
ED137100 ED140011 ED141217 ED143593 ED144826 ED149987 ED149994 ED151297
ED153819 ED154996 ED157817 ED157826

*INTERIOR SPACE (1) ED146693

INTERIOR SPACE (1) ED028631

INTERMEDIATE GRADES (1) ED104670

INTERMEDIATE GRADES (4) ED120341 ED147582 ED150273 ED157817

INTERMEDIATE SCIENCE CURRICULUM STUDY (1) ED070570*

INTERNATIONAL EDUCATION (1) ED087670

INTERNATIONAL EDUCATION (1) ED129675

INTERNATIONAL ORGANIZATIONS (2) ED040866 ED123033

INTERNATIONAL ORGANIZATIONS (1) ED150078

INTERNATIONAL PROGRAMS (1) ED128282

INTERNATIONAL RELATIONS (2) ED139372 ED153326

*INTERSTATE ENERGY CONSERVATION LEADERSHIP PROJECT (1) ED150755

*INTERVIEWS (1) ED130301

INTRODUCTORY COURSES (1) ED102058

INTRODUCTORY PHYSICAL SCIENCE (1) ED070570*

INVESTMENT (1) ED147108

*IOWA (1) ED147129

ISSUES (1) ED102058

JOB DEVELOPMENT (1) ED150046

JOBS (1) ED109448

JOB SKILLS (1) ED152385

JOB TRAINING (1) ED109448

*JUNIOR COLLEGES (4) ED125703 ED143400 ED149797 ED152385

JUNIOR COLLEGES (2) ED013201* ED095965

JUNIOR HIGH SCHOOLS (1) ED107495

JUNIOR HIGH SCHOOLS (7) ED100007 ED112001 ED120341 ED139967 ED147464 ED150273 ED157817

*JUNIOR HIGH SCHOOL STUDENTS (1) ED154999

JUNIOR HIGH SCHOOL STUDENTS (2) ED133162 ED151297

JUSTICE (1) ED139372

*KANSAS (1) ED147130

KELLER PLAN (1) ED121580

*KENTUCKY (1) ED147131

KINDERGARTEN (3) ED050063 ED085316 ED147581

KINETIC MOLECULAR THEORY (3) ED071894 ED071895 ED134424

*KINETICS (1) ED070649

KINETICS (2) ED067303 ED083013*

KNOWLEDGE LEVEL (1) ED151242

LABOR (1) ED139372

LABORATORIES (1) ED134417

LABORATORY EQUIPMENT (1) ED126946*

LABORATORY EXPERIMENTS (6) ED013201* ED071894 ED152529 ED152530 ED152531 ED152532

LABORATORY MANUALS (3) ED020113 ED068350* ED071894

LABORATORY MANUALS	(1)	ED061083
LABORATORY PROCEDURES	(1)	ED107809
LABOR ECONOMICS	(1)	ED095312
LABOR FORCE	(1)	ED137040
*LABOR MARKET	(1)	ED120416
LABOR MARKET	(1)	ED095312
LABOR SUPPLY	(1)	ED152385
LABOR TURNOVER	(1)	ED095312
LAKE POWELL	(1)	ED133126
LANDSCAPING	(1)	ED130437
*LAND USE	(4)	ED106025 ED118331 ED125850 ED142423
LAND USE	(15)	ED052059 ED088185 ED093695 ED094977 ED116256 ED115556 ED115557 ED116921 ED117010 ED118468 ED119953 ED124356 ED137040 ED153893 ED157759
LANGUAGE ARTS	(2)	ED101959 ED137100
LAP	(1)	ED095024
*LAWS	(1)	ED142424
LAWS	(1)	ED116979
LEADERSHIP STYLES	(1)	ED136325
*LEARNING ACTIVITIES	(28)	ED092370 ED092395 ED099234 ED101959 ED103413 ED106070 ED112001 ED119957 ED125885 ED129677 ED130117 ED130821 ED130822 ED130831 ED130833 ED144826 ED147217 ED147464 ED147581 ED147582 ED147587 ED148561 ED149979 ED149980 ED149987 ED149994 ED150273 ED157683
LEARNING ACTIVITIES	(22)	ED085316 ED097212 ED099188 ED101937 ED106670 ED106213 ED107995 ED107809 ED114208 ED117625 ED117626 ED120341 ED120543 ED121569 ED123035 ED141065 ED141066 ED141067 ED141217 ED147187 ED147188 ED157681
LEARNING ACTIVITY PACKAGE	(1)	ED095024
LEARNING EXPERIENCE	(1)	ED091283
*LEARNING MODULES	(1)	ED132084
LEARNING MODULES	(1)	ED133195
LEARNING PROCESSES	(1)	ED003207
LEGAL AID	(1)	ED110256
*LEGAL PROBLEMS	(1)	ED116979
LEGAL RESPONSIBILITY	(1)	ED149487
*LEGISLATION	(1)	ED154326
LEGISLATION	(3)	ED106025 ED119312 ED142424
LEGISLATIVE REPORTS	(1)	ED123052
LEGISLATORS	(1)	ED139372
*LESSON PLANS	(1)	ED153846
LESSON PLANS	(11)	ED085316 ED130117 ED132084 ED147581 ED147582 ED147587 ED154996 ED157817 ED157818 ED157819 ED157820
*LIBERAL ARTS	(1)	ED133260
LIBERAL ARTS	(1)	ED052107
LIBRARY ACQUISITION	(6)	ED115539 ED115541 ED115547 ED115551 ED115556 ED115557
*LIBRARY PLANNING	(1)	ED149717
*LIBRARY TECHNICAL PROCESSES	(1)	ED030459
*LIBYA	(1)	ED132084
*LIFE CYCLE COST ANALYSIS	(1)	ED094477
LIFE CYCLE COST ANALYSIS	(1)	ED096733
*LIFE CYCLE COSTING	(3)	ED120896 ED120967 ED147108
LIFE CYCLE COSTING	(8)	ED100004 ED100005 ED100006 ED133907 ED145586 ED146701 ED146702 ED147966
LIFE CYCLE COSTS	(2)	ED102715 ED114920
*LIFE STYLE	(1)	ED121570
LIFE STYLE	(7)	ED093765 ED106013 ED133126 ED133831 ED150755 ED151242 ED151297
LIGHT	(1)	ED029468
*LIGHTING	(2)	ED028631 ED083674
LIGHTING	(12)	ED094477 ED096747 ED097212 ED102715 ED120904 ED120967 ED122363 ED122364 ED125099 ED128908 ED146695 ED154507
LIGHTING DESIGN	(2)	ED082321 ED088183
LIMNOLOGY	(1)	ED141165
LITERACY	(1)	ED128282
*LITERATURE	(1)	ED146933
*LITERATURE REVIEWS	(3)	ED120894 ED120896 ED136325
LITERATURE REVIEWS	(2)	ED055814 ED142794
LIVING STANDARDS	(5)	ED106013 ED116878 ED124356 ED127090 ED150046
*LOCAL GOVERNMENT	(1)	ED149450
LOCAL GOVERNMENT	(4)	ED105845 ED110256 ED116878 ED118331
*LOUISIANA	(1)	ED147132

LOUISIANA	(1)	ED120543
LOUISIANA (NEW ORLEANS)	(1)	ED120009
*LOW INCOME	(1)	ED142232
LOW RENT HOUSING	(1)	ED157785
LUMBER INDUSTRY	(1)	ED112001
MAGNETS	(1)	ED041747
*MAINE	(1)	ED147133
MAINTENANCE	(4)	ED088183 ED119312 ED120896 ED144249
*MANAGEMENT	(2)	ED126594 ED144460
MANAGEMENT	(2)	ED130437 ED143296
MANAGEMENT BY OBJECTIVES	(1)	ED136325
MANAGEMENT GAMES	(1)	ED126946
*MANAGEMENT INFORMATION SYSTEMS	(2)	ED078508 ED115857
*MANAGEMENT SYSTEMS	(2)	ED082974 ED130397
MANAGEMENT SYSTEMS	(1)	ED126594
MAN AND ENVIRONMENT	(1)	ED144826
MAN MACHINE SYSTEMS	(1)	ED144249
*MANPOWER DEVELOPMENT	(1)	ED109448
MANPOWER DEVELOPMENT	(4)	ED109447 ED137187 ED151142 ED152385
*MANPOWER NEEDS	(76)	ED109447 ED109448 ED116952 ED118451 ED127414 ED147114 ED147115 ED147116 ED147117 ED147118 ED147119 ED147120 ED147121 ED147122 ED147123 ED147124 ED147125 ED147126 ED147127 ED147128 ED147129 ED147130 ED147131 ED147132 ED147133 ED147134 ED147135 ED147136 ED147137 ED147138 ED147139 ED147140 ED147141 ED147142 ED147143 ED147144 ED147145 ED147146 ED147147 ED147148 ED147149 ED147150 ED147151 ED147152 ED147153 ED147154 ED147155 ED147156 ED147157 ED147158 ED147159 ED147160 ED147161 ED147162 ED147163 ED147164 ED147165 ED147166 ED147167 ED147168 ED147169 ED147170 ED147171 ED147172 ED147173 ED147174 ED147175 ED147176 ED147177 ED147178 ED147179 ED147180 ED147181 ED147182 ED151142 ED153034
MANPOWER NEEDS	(7)	ED114272 ED114538 ED120416 ED129703 ED141121 ED143400 ED152385
MANPOWER UTILIZATION	(2)	ED119970 ED120416
*MANUALS	(1)	ED135637
MANUFACTURING	(2)	ED083013 ED120341
MAP SKILLS	(1)	ED157817
MARIHUANA	(1)	ED130301
MARINE BIOLOGY	(1)	ED153893
MARKETING	(3)	ED100004 ED100005 ED100006
*MARKET SYSTEM	(2)	ED117023 ED117024
*MARYLAND	(1)	ED147134
MARYLAND	(1)	ED150273
*MASSACHUSETTS	(1)	ED147135
MASS MEDIA	(2)	ED104658 ED151946
*MASTER PLANS	(1)	ED114272
MATHEMATICAL MODELS	(2)	ED100005 ED126946
MATHEMATICS	(2)	ED085316 ED157818
MATHEMATICS INSTRUCTION	(1)	ED143593
*MATTER	(1)	ED050063
MATTER	(1)	ED133440
MATURATION	(1)	ED100536
MEASUREMENT	(2)	ED088181 ED140465
MEASUREMENT INSTRUMENTS	(1)	ED146694
MEASUREMENT TECHNIQUES	(1)	ED136443
*MECHANICAL EQUIPMENT	(3)	ED029488 ED102715 ED130437
MECHANICAL EQUIPMENT	(11)	ED028631 ED088184 ED096747 ED099962 ED105552 ED119375 ED120967 ED122363 ED141955 ED146701 ED150699
MECHANICS (PHYSICS)	(2)	ED083013 ED121580
*MEDIA SELECTION	(1)	ED155066
MEDIA SELECTION	(1)	ED074009
MEDICAL RESEARCH	(1)	ED148593
MEDICAL SERVICES	(1)	ED150078
MEMPHIS	(1)	ED078508
MEMPHIS CITY SCHOOLS	(1)	ED122440
*MENTALLY HANDICAPPED	(1)	ED088258
MERCHANDISE INFORMATION	(2)	ED077088 ED096747
METAL INDUSTRY	(1)	ED112001
METAL WORKING OCCUPATIONS	(1)	ED130117
*METEOROLOGY	(1)	ED110346
METEOROLOGY	(2)	ED064139 ED131539
*METHODS	(1)	ED122440

METHODS	(1)	ED141955
METRIC SYSTEM	(2)	ED107809 ED140011
MIAMI DADE COMMUNITY COLLEGE FL	(1)	ED144826
*MICHIGAN	(4)	ED098625 ED133831 ED134416 ED147136
MIDDLE CLASS CULTURE	(1)	ED124356
MIDDLE SCHOOLS	(5)	ED100007 ED136325 ED147464 ED149987 ED150273
MIDLAND	(1)	ED098625
MIGRATION	(1)	ED124369
*MINERALS	(1)	ED125860
*MINNESOTA	(3)	ED116900* ED137068 ED147137
MINORITY GROUPS	(1)	ED139372
*MISSISSIPPI	(1)	ED147138
*MISSOURI	(1)	ED147139
*MODELS	(5)	ED126946* ED129526 ED141164 ED141193 ED153034
MODELS	(5)	ED091261 ED098625 ED120009 ED127115 ED155066
MODERN SCIENCE	(1)	ED107809
*MONEY MANAGEMENT	(2)	ED117023 ED117024
MONEY MANAGEMENT	(1)	ED130949
*MONTANA	(1)	ED147140
MONTANA	(1)	ED149450
MORAL DEVELOPMENT	(1)	ED091261
*MORAL ISSUES	(1)	ED091261
*MORAL REASONING	(1)	ED091261
MORAL VALUES	(1)	ED091261
MOTION	(3)	ED056860* ED121580 ED134424
MOTOR VEHICLES	(3)	ED147581 ED147582 ED147587
MULTIMEDIA INSTRUCTION	(1)	ED130949
*MUSEUMS	(1)	ED106213
MUSEUMS	(1)	ED134417
NAEE	(1)	ED120009
NALP	(1)	ED127203
NARST	(1)	ED064150
*NATIONAL ASSESSMENT OF EDUCATIONAL PROGRESS	(1)	ED127203
NATIONAL ASSOCIATION FOR ENVIRONMENTAL EDUCATION	(1)	ED120009
NATIONAL EDUCATION ASSOCIATION	(1)	ED154996
*NATIONAL HIGH SCHOOL DEBATE RESOLUTIONS (1978 79)	(1)	ED155758
NATIONAL NORMS	(1)	ED106013
*NATIONAL ORGANIZATIONS	(1)	ED105845*
*NATIONAL PROGRAMS	(1)	ED132024
*NATIONAL RECREATION AND PARK ASSOCIATION	(1)	ED141186
*NATIONAL RESEARCH COUNCIL	(2)	ED148593 ED152535
NATIONAL SCIENCE FOUNDATION	(5)	ED018366* ED020112* ED020113* ED119992 ED151142
*NATIONAL SCIENCE TEACHERS ASSOCIATION	(1)	ED157744
NATIONAL SCIENCE TEACHERS ASSOCIATION	(3)	ED111662 ED111663 ED111664
*NATIONAL SURVEYS	(6)	ED088203 ED127203 ED133873 ED141129 ED156453 ED156454
NATIONAL SURVEYS	(18) ED125703 ED142135 ED143400 ED143599 ED147167 ED147168 ED147169 ED147170 ED147173 ED147174 ED147175 ED147176 ED147177 ED147178 ED147179 ED147180 ED147181 ED147182	
NATURAL GAS	(1)	ED135037
*NATURAL RESOURCES	(53) ED042649 ED083013* ED086075 ED087670* ED088181 ED089044 ED099200 ED099236 ED103214 ED104670* ED106070 ED108891 ED111662 ED111663 ED111664 ED114270* ED116920* ED116921 ED118363* ED119952 ED119953 ED123052 ED125849 ED125850* ED125858 ED125859 ED125860 ED127090 ED132084 ED133162 ED133172 ED133173 ED133228 ED134412 ED134416 ED134417 ED134442 ED134472 ED135037 ED137075 ED137100 ED140422 ED140444 ED140445 ED140446 ED140447 ED140448 ED140459 ED140600 ED149963 ED153893 ED159012* ED157018	
NATURAL RESOURCES	(79) ED055814 ED064139* ED075163 ED082974 ED085316 ED092376 ED097212 ED098112 ED099188 ED101937 ED101959 ED103213 ED104658* ED105850* ED106120* ED107517 ED107524 ED110256 ED116900* ED117010 ED119954 ED120341 ED121570* ED124356 ED124369 ED124395 ED125863 ED125865 ED125866 ED125885 ED127109 ED127115 ED128282 ED129675 ED130821 ED130822 ED130831 ED130833 ED133223 ED133229 ED137040 ED139372 ED139670 ED141065* ED141066* ED141067* ED141121 ED141163 ED142794 ED144460 ED144789 ED144828 ED146442 ED147188 ED148561 ED148593 ED148609 ED148610 ED148611 ED149987 ED149994 ED150046 ED152535 ED153819 ED153820 ED153821 ED153871* ED153938 ED154996 ED156453 ED156463 ED156474 ED156566 ED157681 ED157683 ED157704 ED157720 ED157765 ED157842	
*NATURAL SCIENCES	(4)	ED018366* ED130845 ED130846 ED130848
NATURAL SCIENCES	(3)	ED092107 ED129675 ED130847
*NAVAJOS	(4)	ED124356 ED127096 ED133124 ED133126
*NEBRASKA	(1)	ED147141
NEBRASKA	(1)	ED095965

NEEDS (1) ED150078
*NEEDS ASSESSMENT (2) ED141259 ED145595
NEEDS ASSESSMENT (4) ED125076 ED136325 ED144261 ED150699
*NEVADA (1) ED147142
*NEW HAMPSHIRE (1) ED147143
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*NEW JERSEY (2) ED144261 ED147144
*NEW MEXICO (2) ED118331 ED147145
*NEW RURAL SOCIETY (1) ED122756
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*NEWSLETTERS (1) ED092418
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*NEWS REPORTING (1) ED130301
NEWTONS LAWS (1) ED121580
*NEW YORK (1) ED147146
NEW YORK (NEW HYDE PARK) (1) ED130397
NEW YORK (NEW YORK) (1) ED154507
NEW YORK STATE (4) ED088181 ED088183 ED088184 ED088185
*NIGERIA (1) ED132084
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ED147121 ED147122 ED147123 ED147124 ED147125 ED147126 ED147127 ED147128
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NONDISCRIMINATORY EDUCATION (1) ED116331
*NORTH CAROLINA (1) ED147147
*NORTH DAKOTA (1) ED147148
NORTH DAKOTA (1) ED149450
NSF (1) ED119992
NSTA (3) ED111662 ED111663 ED111664
*NUCLEAR ENERGY (3) ED107517 ED107518 ED118451
NUCLEAR ENERGY (4) ED099199 ED099200 ED107519 ED119478
*NUCLEAR PHYSICS (25) ED003207 ED038309 ED040844 ED042649 ED052973 ED054966 ED054967
ED054968 ED054969 ED055810 ED055811 ED058896 ED067273 ED107517 ED107518
ED107519 ED107520 ED107522 ED107523 ED107524 ED115478 ED124367 ED129005
ED129006 ED130847
NUCLEAR PHYSICS (4) ED070649 ED107521 ED118451 ED120416
*NUCLEAR POWER (3) ED091171 ED156453 ED156454
*NUCLEAR POWER PLANTS (2) ED130847 ED141165
NUCLEAR REACTORS (3) ED107520 ED107522 ED107523
*NUCLEAR TECHNICIANS (1) ED120416
*NUCLEAR TECHNOLOGY (1) ED152385
NUCLEAR TECHNOLOGY (1) ED120416
*NUFFIELD SECONDARY SCIENCE (1) ED069551
*NUTRITION (1) ED114334
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*OBJECTIVE TESTS (1) ED125866
*OCCUPATIONAL CLUSTERS (1) ED130117
OCCUPATIONAL CLUSTERS (1) ED120341
OCCUPATIONAL GUIDANCE (2) ED109448 ED130117
OCCUPATIONAL INFORMATION (1) ED139967
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*OCEANOLOGY (2) ED106120 ED141165
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*OFFICES (FACILITIES) (1) ED029468
*OHIO (3) ED127160 ED127161 ED147149
OHIO (1) ED118468
*OIL (1) ED141187
*OKLAHOMA (5) ED108881 ED147150 ED153819 ED153820 ED153841
ON LINE SYSTEMS (1) ED126946
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*OPERATING EXPENSES (5) ED082321 ED126553 ED129909 ED141944 ED143496
OPERATING EXPENSES (3) ED100003 ED100007 ED120904

*OPERATIONS RESEARCH	(1)	ED1269468						
OPINIONS	(2)	ED094977	ED125865					
OPTIONS IN EDUCATION	(1)	ED130301						
*OREGON	(1)	ED147151						
OREGON	(1)	ED130448						
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*ORGANIZATIONS (GROUPS)	(1)	ED141186						
*OUTDOOR EDUCATION	(1)	ED106213						
OUTDOOR EDUCATION	(2)	ED099236	ED101937					
PAMPHLETS	(2)	ED052973*	ED129603					
PARENT SCHOOL RELATIONSHIP	(1)	ED092418						
PARKS	(2)	ED126594	ED141186					
PEDESTRIAN TRAFFIC	(3)	ED147581	ED147582	ED147587				
*PENNSYLVANIA	(2)	ED132707	ED147152					
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PERFORMANCE BASED EDUCATION	(2)	ED130117	ED133831					
*PERFORMANCE CRITERIA	(1)	ED100004						
PERFORMANCE CRITERIA	(4)	ED099962	ED100003	ED100007	ED102715			
*PERFORMANCE SPECIFICATIONS	(9) ED146701	ED119320 ED146702	ED119375	ED130448	ED131552	ED140508	ED146694	ED146695
PERFORMANCE SPECIFICATIONS	(7)	ED088184	ED088185	ED133831	ED133918	ED136443	ED145586	ED145595
*PERSONALITY STUDIES	(1)	ED086467*						
*PERSONALIZED SYSTEM OF INSTRUCTION	(1)	ED121580						
PERSONAL VALUES	(1)	ED151297						
PERSONNEL	(1)	ED151142						
*PERSUASIVE DISCOURSE	(1)	ED155758						
PESTICIDES	(72) ED147119 ED147127 ED147135 ED147143 ED147151 ED147159 ED147167 ED147175 ED159012*	ED107495* ED147120 ED147128 ED147136 ED147144 ED147152 ED147160 ED147168 ED147176	ED117016 ED147121 ED147129 ED147137 ED147145 ED147153 ED147161 ED147169 ED147177	ED147114 ED147122 ED147130 ED147138 ED147146 ED147154 ED147162 ED147170 ED147178	ED147115 ED147123 ED147131 ED147139 ED147147 ED147155 ED147163 ED147171 ED147179	ED147116 ED147124 ED147132 ED147140 ED147148 ED147156 ED147164 ED147172 ED147180	ED147117 ED147125 ED147133 ED147141 ED147149 ED147157 ED147165 ED147173 ED147181	ED147118 ED147126 ED147134 ED147142 ED147150 ED147158 ED147166 ED147174 ED147182
*PETROLEUM INDUSTRY	(4)	ED129526	ED141187	ED152385	ED153326			
PETROLEUM INDUSTRY	(4)	ED088181	ED093765	ED127414*	ED153893			
PHILADELPHIA ELECTRIC COMPANY PA	(1)	ED153871*						
*PHYSICAL DESIGN NEEDS	(1)	ED146693						
*PHYSICAL ENVIRONMENT	(2)	ED052107	ED115539					
PHYSICAL ENVIRONMENT	(1)	ED153893						
*PHYSICAL GEOGRAPHY	(3)	ED052107	ED1103468	ED118468				
PHYSICAL GEOGRAPHY	(1)	ED157817						
*PHYSICAL SCIENCES	(11) ED130845	ED020112* ED130847	ED032236 ED130848	ED064150 ED148593	ED067273	ED167809	ED129602	ED130844
PHYSICAL SCIENCES	(13) ED130846	ED020113* ED134422	ED061083* ED134424	ED068350* ED134426	ED093656 ED134452	ED099188 ED141164	ED119992	ED129603
PHYSICIANS ASSISTANTS	(1)	ED120341						
*PHYSICS	(7)	ED041747	ED059896	ED071894	ED071895	ED121580	ED127161	ED129605
PHYSICS	(19) ED0079027 ED1103468	ED013754 ED107518 ED124387	ED020113* ED107519 ED127203	ED054966 ED107520 ED129606	ED054967 ED107521	ED054968 ED107522	ED054969 ED107523	ED055810 ED107524
*PHYSICS INSTRUCTION	(1)	ED003207						
PHYSIOLOGY	(1)	ED069551*						
PIAGET (JEAN)	(1)	ED100536						
*PILOT PROJECTS	(1)	ED116878*						
PILOT PROJECTS	(1)	ED106881						
PITTSBURGH	(1)	ED003207						
PLANNED COMMUNITY	(1)	ED074694*						
*PLANNING	(4)	ED106025	ED118331	ED132024	ED142423			
PLANNING	(4)	ED098112	ED124369	ED127414*	ED135637			
POLICE	(1)	ED126594						
*POLICY	(2)	ED088719*	ED157761					
POLICY	(4)	ED064140*	ED077704	ED089946*	ED127109			
*POLICY FORMATION	(9) ED141129	ED105845* ED157820	ED110256	ED118363*	ED133899	ED134456	ED137068	ED141121
POLICY FORMATION	(5)	ED106025	ED125860	ED128929	ED133172	ED153938		
POLITICAL INFLUENCES	(3)	ED066258	ED153326	ED153893				
*POLITICAL ISSUES	(1)	ED110256						
POLITICAL ISSUES	(3)	ED087670*	ED098100	ED155758				

POLITICS	(5)	ED115556	ED115557	ED139372	ED156453	ED156454		
*POLLUTION	(75)	ED0529738	ED0591018	ED0641398	ED0994977	ED1116921	ED1471144	ED1471152
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*PROGRAM DESCRIPTIONS	(7)	ED065296	ED106120*	ED120009	ED126594	ED133223	ED134412	ED143400
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*PROGRAM DEVELOPMENT	(2)	ED136443	ED157761					
PROGRAM DEVELOPMENT	(3)	ED120009	ED141259	ED152385				
*PROGRAMED INSTRUCTION	(1)	ED121580						
PROGRAMED INSTRUCTION	(1)	ED130949						
*PROGRAMED TEXTS	(2)	ED003207	ED064140*					
PROGRAM EVALUATION	(3)	ED122676	ED144789	ED151946				
*PROGRAM GUIDES	(4)	ED122364	ED124387	ED126594	ED157785			
PROGRAMING	(1)	ED115857						
*PROGRAMING (BROADCAST)	(1)	ED093695*						
PROGRAM PLANNING	(4)	ED134412	ED141259	ED143400	ED157785			
PROJECT COAST	(3)	ED141163	ED141164	ED141165				
PROJECT RARE	(2)	ED157681	ED157683					
*PROJECTS	(1)	ED082974						
PSECS	(1)	ED117858						
PSI	(1)	ED121580						
PSYCHOLOGICAL STUDIES	(1)	ED100536						
PUBLIC AFFAIRS EDUCATION	(1)	ED070649						
*PUBLICATIONS	(1)	ED070607						
PUBLICATIONS	(2)	ED120009	ED140510					
PUBLIC FACILITIES	(1)	ED124369						
*PUBLIC HEALTH	(2)	ED070606	ED070607					
PUBLIC HEALTH	(4)	ED041399	ED108881	ED115478*	ED125860			
*PUBLIC LIBRARIES	(1)	ED131597						
PUBLIC LIBRARIES	(2)	ED126594	ED149717					
*PUBLIC OPINION	(3)	ED141129	ED156453	ED156454				
*PUBLIC POLICY	(2)	ED116979	ED153326					
PUBLIC POLICY	(4)	ED095020	ED096154	ED126946*	ED149144			
PUBLIC RELATIONS	(1)	ED091283						
PUBLIC SCHOOLS	(1)	ED092418						
*PUBLIC SCHOOLS ENERGY CONSERVATION SERVICE	(1)	ED117858						
PUBLIC SCHOOL SYSTEMS	(1)	ED133873						
PUBLIC SPEAKING	(1)	ED155758						
PUBLIC SUPPORT	(1)	ED141129						
PUBLIC TRANSPORTATION	(1)	ED088185						
*PUERTO RICO	(1)	ED147153						
PURCHASING	(3)	ED077088	ED130949	ED133909				
*QUALITY CONTROL	(2)	ED052059	ED116921					
*QUALITY OF LIFE	(3)	ED116878*	ED129526	ED153938				
QUALITY OF LIFE	(3)	ED150078	ED150755	ED156566				
*QUESTIONING TECHNIQUES	(1)	ED070570*						
QUESTIONING TECHNIQUES	(2)	ED091261	ED098100					
*QUESTIONNAIRES	(1)	ED125865						
QUESTIONNAIRES	(4)	ED125866	ED143400	ED144240*	ED145595			
*QUINMESTER PROGRAM	(2)	ED079027	ED093656					
*RACHEL CARSON PROJECT	(1)	ED099188						
RACIAL DISTRIBUTION	(1)	ED118468						
RACISM	(1)	ED130301						
*RADIATION	(5)	ED042649	ED052973*	ED070606	ED070607	ED115478*		
RADIATION	(175)	ED067273	ED107517	ED107518	ED107522	ED107524	ED118451*	ED147114
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*RADIATION BIOLOGY	(2)	ED013201*	ED013754					
RADIATION EFFECTS	(2)	ED040866	ED070649					
*RADIO	(1)	ED130301						
RADIO	(1)	ED093695*						
RADIOACTIVITY	(1)	ED107524						
*RADIOISOTOPES	(4)	ED013201*	ED054968	ED055810	ED107524			
RADIOISOTOPES	(4)	ED013754	ED107517	ED107518	ED107520			
RADIOLOGIC TECHNOLOGISTS	(1)	ED120416						

RATING SCALES	(1)	ED151927
READINESS (MENTAL)	(1)	ED100536
READING IMPROVEMENT	(1)	ED106213
READING INSTRUCTION	(1)	ED143593
READING MATERIALS	(1)	ED111663
RECORDKEEPING	(2)	ED144240# ED147996
RECORDS (FORMS)	(2)	ED130437 ED140424
RECREATION	(3)	ED115556 ED115557 ED126594
*RECYCLING	(3)	ED082974 ED119952 ED150699
RECYCLING	(5)	ED098096 ED099236 ED127731 ED142423 ED153893
*REFERENCE BOOKS	(1)	ED155012#
REFERENCE BOOKS	(1)	ED119967#
*REFERENCE MATERIALS	(4)	ED102715 ED133196 ED134445 ED149963
REFERENCE MATERIALS	(9) ED135637	ED013754 ED070607 ED075230 ED077704 ED089946# ED133192 ED133195 ED147188
REFRIGERATION MECHANICS	(2)	ED028631 ED029468#
REGIONAL COOPERATION	(1)	ED134450
*REGIONAL PLANNING	(2)	ED134450 ED137068
RELATIONSHIP	(1)	ED151242
*RELEVANCE (EDUCATION)	(1)	ED133260
RELEVANCE (EDUCATION)	(4)	ED091283 ED102058 ED107809 ED121570#
RELIGION	(2)	ED124356 ED125850#
*REPORTS	(2)	ED116920# ED127109
REPORTS	(3)	ED052059 ED148609 ED148611
*REPRODUCTION (BIOLOGY)	(1)	ED095024
*RESEARCH	(6)	ED106120# ED108881 ED124426 ED130849 ED132024 ED133172
RESEARCH	(8) ED155048	ED018366# ED088203 ED103214 ED114272# ED134416 ED146693 ED148610
RESEARCH METHODOLOGY	(1)	ED126946#
*RESEARCH NEEDS	(1)	ED105552
RESEARCH NEEDS	(3)	ED145595 ED151242 ED153034
*RESEARCH PROJECTS	(1)	ED148593
RESEARCH PROJECTS	(2)	ED122756 ED145595
*RESEARCH PROPOSALS	(1)	ED131597
RESEARCH REPORTS	(8) ED148610	ED070570# ED070619# ED086467# ED127263 ED135064 ED141069 ED148609
*RESEARCH TOOLS	(1)	ED155758
RESEARCH TOOLS	(1)	ED126946#
*RESEARCH UTILIZATION	(1)	ED149797
RESEARCH UTILIZATION	(1)	ED154326
*RESERVATIONS (INDIAN)	(3)	ED124356 ED127690 ED133126
RESERVATIONS (INDIAN)	(1)	ED133124
*RESOURCE ALLOCATIONS	(2)	ED088181 ED152535
RESOURCE ALLOCATIONS	(6)	ED093765 ED114920# ED122676 ED125860 ED150078 ED153821
*RESOURCE GUIDES	(5)	ED125863 ED130949 ED147996# ED156463 ED156474
RESOURCE GUIDES	(8) ED152773	ED085316 ED089993 ED105845# ED111663 ED116979 ED120543 ED133831
*RESOURCE MANAGEMENT	(1)	ED135637
*RESOURCE MATERIALS	(11) ED123042#	ED042649 ED054967 ED054968 ED054969 ED092376 ED104658# ED121569 ED147188 ED152773 ED157744
RESOURCE MATERIALS	(30) ED092395 ED140044 ED147582	ED041747 ED054966 ED055010 ED059896 ED079027 ED087670# ED091171 ED098096 ED098100 ED107519 ED114268 ED130821 ED134424 ED133173 ED146045 ED146046 ED146047 ED146058 ED146059 ED147187 ED147581 ED147587 ED149979 ED149980 ED149987 ED157782 ED157842
*RESOURCES	(1)	ED066258
RESOURCES	(1)	ED105845#
*RESOURCES FOR THE FUTURE	(1)	ED103214
*RESOURCE UNITS	(1)	ED067303
RESOURCE UNITS	(2)	ED092376 ED130949
RETARDATION	(1)	ED100536
RFP	(1)	ED105214
*RHODE ISLAND	(2)	ED147154 ED156474
ROLE PERCEPTION	(1)	ED141193
ROLE PLAYING	(1)	ED141193
*RURAL AREAS	(4)	ED106025 ED118331 ED124369 ED137040
RURAL AREAS	(3)	ED066258 ED106013 ED133126
*RURAL DEVELOPMENT	(5)	ED110256 ED116878# ED122756 ED129526 ED134233
*RURAL ECONOMICS	(1)	ED106013

RURAL ECONOMICS	(1)	ED127090
RURAL EDUCATION	(1)	ED134233
RURAL POPULATION	(1)	ED129526
RURAL TO URBAN MIGRATION	(2)	ED133126 ED150046
*SAFETY	(4)	ED070606 ED070607 ED107518 ED129606
SAFETY	(3)	ED107523 ED118451* ED140011
*SAFETY EDUCATION	(3)	ED147581 ED147582 ED147587
SANITARY FACILITIES	(1)	ED142232
SANITATION	(1)	ED130437
SCHEDULING	(5)	ED122363 ED128929 ED130437 ED150756 ED154507
SCHOLARSHIP FUNDS	(1)	ED018366*
SCHOOL BUILDINGS	(4)	ED078508 ED125099 ED128908 ED142135
*SCHOOL BUSES	(1)	ED128929
SCHOOL BUSES	(2)	ED100069 ED150756
*SCHOOL CLOSING	(2)	ED125076 ED151946
SCHOOL COMMUNITY COOPERATION	(1)	ED151946
SCHOOL COMMUNITY RELATIONSHIP	(4)	ED091283 ED092418 ED125076 ED149487
SCHOOL CONDITIONS	(1)	ED094474
*SCHOOL CONSTRUCTION	(2)	ED125071* ED149487
SCHOOL CONSTRUCTION	(2)	ED122676 ED133918
SCHOOL DEMOGRAPHY	(1)	ED125076
*SCHOOL DESIGN	(3)	ED099962 ED132707 ED133907
SCHOOL DESIGN	(3)	ED125071* ED126553 ED149487
SCHOOL DISTRICTS	(1)	ED122364
*SCHOOL DISTRICT SPENDING	(3)	ED130397 ED133873 ED133909
SCHOOL DISTRICT SPENDING	(1)	ED133907
*SCHOOL IMPROVEMENT	(6)	ED114920* ED117858 ED125076 ED132707 ED133907 ED150899
SCHOOL IMPROVEMENT	(8) ED144261	ED082321 ED083674 ED119312 ED125071* ED130397 ED133899 ED133918
*SCHOOL INDUSTRY RELATIONSHIP	(1)	ED125703
SCHOOL INDUSTRY RELATIONSHIP	(2)	ED100069 ED152385
SCHOOL INTEGRATION	(2)	ED130301 ED136325
*SCHOOL MAINTENANCE	(3)	ED122676 ED130437 ED132707
SCHOOL MAINTENANCE	(11) ED140465*	ED082321 ED096733 ED100069 ED114920* ED117658 ED133909 ED133918 ED141955 ED144240* ED154507
SCHOOL ORGANIZATION	(1)	ED133909
*SCHOOL PERSONNEL	(1)	ED151927
SCHOOL PERSONNEL	(2)	ED128929 ED144240*
*SCHOOL PLANNING	(4)	ED119312 ED133899 ED133918 ED149487
SCHOOL PLANNING	(3)	ED099962 ED120896 ED125076
*SCHOOL ROLE	(1)	ED156429
SCHOOLS	(2)	ED094474 ED108367
SCHOOL SAFETY	(1)	ED130437
SCHOOL SCHEDULES	(1)	ED150699
SCHOOL SPACE	(1)	ED125071*
*SCHOOL STATISTICS	(1)	ED133873
SCHOOL SURVEYS	(3)	ED122440 ED128904 ED151927
*SCHOOL SYSTEMS	(2)	ED122440 ED144240*
SCHOOL SYSTEMS	(1)	ED149450
*SCHOOL WITHOUT SCHOOLS	(1)	ED151946
*SCIENCE ACTIVITIES	(15) ED134424	ED013754 ED020112* ED020113* ED034860* ED041683* ED126387 ED134442 ED134426 ED152529 ED152530 ED153531 ED152532 ED154996 ED154999
SCIENCE ACTIVITIES	(8) ED157681	ED064094* ED069351* ED071894 ED117957* ED120341 ED151297 ED153726*
SCIENCE CAREERS	(1)	ED126387
*SCIENCE COURSE IMPROVEMENT PROJECT	(1)	ED068350*
SCIENCE COURSE IMPROVEMENT PROJECT	(6)	ED032230 ED119992 ED123042* ED134422 ED134424 ED134426
*SCIENCE COURSES	(1)	ED064150
*SCIENCE CURRICULUM	(1)	ED150273
SCIENCE CURRICULUM	(1)	ED107809
*SCIENCE CURRICULUM IMPROVEMENT STUDY	(1)	ED056860*
*SCIENCE EDUCATION	(15) ED130833	ED018366* ED050063 ED093697 ED101937 ED107809 ED114208 ED126341 ED134442 ED134452 ED144826 ED153843 ED153845 ED153859 ED155018
SCIENCE EDUCATION	(91) ED095024 ED106070 ED116952 ED126387 ED130822	ED070570* ED070606 ED070607 ED084678 ED088719* ED093590 ED093656 ED096130 ED099199 ED099200 ED099236 ED101959 ED103213 ED104658* ED107495* ED107519 ED108891 ED110346* ED111064 ED111063 ED111664 ED118451* ED119957* ED119992 ED121580 ED123033 ED123035* ED123042* ED125885 ED127161 ED127203 ED129602 ED129603 ED130821 ED130831 ED130849 ED132024 ED132025 ED132026 ED133192 ED133193

	ED133194 ED133195 ED133196 ED134422 ED134424 ED134426 ED141064 ED142391							
	ED144789 ED144828 ED146044 ED146045 ED146044 ED146047 ED146048 ED146059							
	ED147188 ED148561 ED148609 ED148610 ED148611 ED149963 ED149979 ED149984							
	ED149987 EW149994 ED151142 EW151946 ED152526 ED152530 ED152531 ED152532							
	EW153841 ED153842 ED153846 ED154999 ED155066 ED156463 ED156466 ED157681							
	ED157683 ED157704 ED157720 ED157744							
*SCIENCE EXPERIMENTS	(1)	ED071894						
SCIENCE EXPERIMENTS	(2)	ED107809	ED147217					
SCIENCE FICTION	(1)	ED0740098						
*SCIENCE HISTORY	(1)	ED129605						
SCIENCE HISTORY	(1)	ED064150						
SCIENCE INSTRUCTION	(1)	ED151297						
*SCIENCE MATERIALS	(1)	ED124387						
SCIENCE MATERIALS	(1)	ED119957B						
SCIENCE PROGRAMS	(1)	ED123033						
*SCIENCES	(3)	ED130849	ED141163	ED141187				
SCIENCES	(11) ED157744	ED085316 ED157817	ED101959 ED157818	ED104670B ED157820	ED137100	ED142422	ED143593	ED144593
*SCIENCE UNITS	(1)	ED153846						
SCIENCE UNITS	(12) ED151297	EW089063 ED152529	EW107809 ED152530	ED129677 ED152531	ED134422 ED152532	ED134424	ED134426	ED142391
SCIENTIFIC CONCEPTS	(2)	ED056860B	ED071895					
SCIENTIFIC MANPOWER	(1)	ED151142						
SCIENTIFIC METHODOLOGY	(1)	ED120341						
*SCIENTIFIC RESEARCH	(8) ED148593	ED096154	ED107520	ED107521	ED107523	ED116952	ED130849	ED141121
SCIENTIFIC RESEARCH	(9) ED148660	ED0183668 ED151242	ED107517	ED107518	ED107522	ED107524	ED126946B	ED132024
*SCIENTISTS	(3)	ED114538	ED129665	ED151142				
SCIENTISTS	(1)	ED156454						
SCRIPTS	(1)	ED130301						
SEA GRANT	(1)	ED1061208						
*SECONDARY EDUCATION	(19) ED1410678 ED153843	ED120543 ED144789 ED153844	ED130822 ED147188 ED153871B	ED130831 ED148561 ED157765	ED132004 ED149963	ED133228 ED149994	ED133229 ED153841	ED137100 ED153842
SECONDARY EDUCATION	(38) ED111662 ED124387 ED132084 ED143593	ED085316 ED111663 ED125865 ED134422 ED147187	ED087670B ED111664 ED125866 ED134424 ED149144	ED098896 ED112001 ED127161 ED134426 ED154999	ED098100 ED117023 ED127203 ED137075 ED155758	ED099188 ED117024 ED127243 ED141164 ED157818	ED107809 ED119992 ED127675 ED141217 ED157819	ED108367 ED130849 ED130117 ED142391
*SECONDARY GRADES	(6)	ED099199	ED099200	ED099236	ED101959	ED141163	ED141165	
SECONDARY GRADES	(3)	ED071894	ED071895	ED093765				
SECONDARY SCHOOLS	(2)	ED094474	ED096733					
*SECONDARY SCHOOL SCIENCE	(29) ED071894 ED111662 ED134424	ED013754 ED071895 ED111663 ED134426	ED032230 ED079027 ED111664 ED134452	ED038309 ED0864678 ED119992 ED137075	ED064098 ED093686 ED124387 ED141164	ED065296 ED095024 ED127161 ED1423918	ED070570B ED096130 ED133162	ED070619 ED097212 ED134422
SECONDARY SCHOOL SCIENCE	(20) ED133194	ED013201B ED0613838 ED133195	ED054986 ED068350B ED133196	ED054987 ED069551B ED141165	ED054988 ED093590 ED155018	ED054989 ED107519	ED055810 ED123642B	ED059896 ED133192 ED133193
*SECONDARY SCHOOL STUDENTS	(1)	ED064150						
SECONDARY SCHOOL STUDENTS	(1)	ED108891						
SELF ESTEEM	(1)	ED091283						
SELF HELP PROGRAMS	(1)	ED095024						
SENIOR HIGH SCHOOLS	(1)	ED157820						
SERVICE VEHICLES	(4)	ED122676	ED147581	ED147582	ED147587			
SEXUALITY	(1)	ED130301						
SHARED FACILITIES	(1)	ED125076						
SHOP CURRICULUM	(1)	ED130117						
SHORT COURSES	(1)	ED106213						
SIMULATED ENVIRONMENT	(2)	ED0746948	ED1269468					
*SIMULATION	(2)	ED092418	ED1269468					
SIMULATION	(7)	ED096733	ED100005	ED129677	ED130949	ED149450	ED151297	ED154996
SIMULATORS	(1)	ED1269468						
SITE SELECTION	(3)	ED125071B	ED146695	ED149487				
SKILL DEVELOPMENT	(5)	ED141217	ED147581	ED147582	ED147587	ED154999		
SKILLED LABOR	(1)	ED133126						
SOCIAL ACTION	(2)	ED125863	ED150078					
SOCIAL ATTITUDES	(2)	ED130831	ED133260					
*SOCIAL CHANGE	(4)	ED0746098	ED098112	ED125859	ED133126			
SOCIAL CHANGE	(3)	ED0726668	ED129526	ED153893				
*SOCIAL FACTORS	(1)	ED154326						
SOCIAL FACTORS	(2)	ED129526	ED150078					
*SOCIAL INFLUENCES	(1)	ED129526						

SOCIAL INFLUENCES	(2)	ED118331	ED153893					
SOCIAL PLANNING	(1)	ED093590						
*SOCIAL PROBLEMS	(7)	ED072666	ED102058	ED115478	ED137187	ED141069	ED151242	ED156566
SOCIAL PROBLEMS	(10)	ED064150	ED098100	ED129526	ED137084	ED133260	ED141141	ED150755
	ED151297	ED153054	ED153958					
*SOCIAL RESPONSIBILITY	(2)	ED052059	ED125850					
SOCIAL RESPONSIBILITY	(2)	ED133260	ED150078					
*SOCIAL SCIENCE RESEARCH	(2)	ED118468	ED151242					
*SOCIAL SCIENCES	(5)	ED103214	ED117010	ED117012	ED148593	ED153842		
SOCIAL SCIENCES	(9)	ED052107	ED106213	ED110346	ED115541	ED116979	ED117023	ED117024
	ED129675	ED153841						
*SOCIAL SERVICES	(2)	ED137040	ED149450					
SOCIAL SERVICES	(2)	ED126594	ED129526					
*SOCIAL STUDIES	(7)	ED087670	ED098100	ED141163	ED153843	ED153844	ED153845	ED153859
SOCIAL STUDIES	(10)	ED085316	ED101459	ED104670	ED111044	ED132484	ED133192	ED133193
	ED133194	ED133195	ED133196	ED137100	ED141165	ED143593	ED151297	
*SOCIAL STUDIES UNITS	(1)	ED151297						
SOCIAL STUDIES UNITS	(5)	ED129677	ED157817	ED157818	ED157819	ED157820		
*SOCIAL SYSTEMS	(2)	ED141193	ED153893					
SOCIAL VALUES	(1)	ED151242						
SOCIAL WELFARE	(2)	ED066258	ED094977					
SOCIETAL NEEDS	(1)	ED108881						
SOCIOCULTURAL PATTERNS	(1)	ED150078						
*SOCIOECONOMIC INFLUENCES	(2)	ED127090	ED144828					
SOCIOECONOMIC INFLUENCES	(3)	ED070649	ED133260	ED150078				
SOCIOECONOMIC STATUS	(1)	ED133126						
*SOCIOLOGY	(3)	ED066258	ED141193	ED151242				
SOCIOLOGY	(1)	ED074009						
SOIL CONSERVATION	(2)	ED117010	ED153893					
SOIL SCIENCE	(2)	ED099236	ED118468					
*SOLAR ENERGY	(2)	ED139670	ED141164					
SOLAR ENERGY	(1)	ED119967						
*SOLAR RADIATION	(30)	ED100003	ED100004	ED100005	ED100006	ED100007	ED105552	ED119312
	ED119320	ED119375	ED119967	ED130448	ED130848	ED131539	ED131552	ED131597
	ED133907	ED134443	ED139670	ED144828	ED145586	ED145595	ED146694	ED146701
	ED146702	ED147108	ED149717	ED150046	ED152385	ED152532	ED157704	
SOLAR RADIATION	(18)	ED029468	ED083013	ED088719	ED093765	ED099962	ED102715	ED114670
	ED120894	ED125099	ED126553	ED127731	ED132024	ED133831	ED133918	ED140508
	ED144261	ED146695	ED147966					
SOLID WASTES	(69)	ED147114	ED147115	ED147116	ED147117	ED147118	ED147119	ED147120
	ED147121	ED147122	ED147123	ED147124	ED147125	ED147126	ED147127	ED147128
	ED147129	ED147130	ED147131	ED147132	ED147133	ED147134	ED147135	ED147136
	ED147137	ED147138	ED147139	ED147140	ED147141	ED147142	ED147143	ED147144
	ED147145	ED147146	ED147147	ED147148	ED147149	ED147150	ED147151	ED147152
	ED147153	ED147154	ED147155	ED147156	ED147157	ED147158	ED147159	ED147160
	ED147161	ED147162	ED147163	ED147164	ED147165	ED147166	ED147167	ED147168
	ED147169	ED147170	ED147171	ED147172	ED147173	ED147174	ED147175	ED147176
	ED147177	ED147178	ED147179	ED147180	ED147181	ED147182		
*SOUTH CAROLINA	(1)	ED147155						
*SOUTH DAKOTA	(1)	ED147156						
SOUTH DAKOTA	(1)	ED149450						
*SOUTHEASTERN MICHIGAN TECHNICAL ASSISTANCE PROGRAM	(1)	ED149797						
SPACE UTILIZATION	(1)	ED125076						
SPECIAL EDUCATION	(1)	ED140011						
*SPECIAL LIBRARIES	(1)	ED030459						
SPECIAL LIBRARIES	(1)	ED149717						
SPEECH COMMUNICATION	(1)	ED155758						
*SPEECHES	(2)	ED070649	ED125890					
SPEECHES	(9)	ED095965	ED109447	ED109448	ED118331	ED124556	ED133440	ED140011
	ED147109	ED156429						
SPELLING INSTRUCTION	(1)	ED143593						
STAFF UTILIZATION	(1)	ED133909						
*STANDARDS	(3)	ED140508	ED146694	ED154507				
STANDARDS	(7)	ED088183	ED088185	ED119312	ED120967	ED146695	ED146701	ED149487
*STATE ACTION	(1)	ED088203						
STATE ACTION	(1)	ED088185						
STATE AGENCIES	(2)	ED105845	ED141259					
STATE COLLEGES	(1)	ED143296						
STATE CURRICULUM GUIDES	(2)	ED120543	ED147464					
*STATE DEPARTMENTS OF EDUCATION	(1)	ED155018						
STATE DEPARTMENTS OF EDUCATION	(1)	ED150755						

*STATE GOVERNMENT	(2)	ED133124	ED149450					
STATE GOVERNMENT	(3)	ED116900*	ED118331	ED142424				
*STATE LEGISLATION	(69)	ED142424	ED147114	ED147115	ED147116	ED147117	ED147118	ED147119
	ED147120	ED147121	ED147122	ED147123	ED147124	ED147125	ED147126	ED147127
	ED147128	ED147129	ED147130	ED147131	ED147132	ED147133	ED147134	ED147135
	ED147136	ED147137	ED147138	ED147139	ED147140	ED147141	ED147142	ED147143
	ED147144	ED147145	ED147146	ED147147	ED147148	ED147149	ED147150	ED147151
	ED147152	ED147153	ED147154	ED147155	ED147156	ED147157	ED147158	ED147159
	ED147160	ED147161	ED147162	ED147163	ED147164	ED147165	ED147166	ED147167
	ED147168	ED147169	ED147170	ED147171	ED147173	ED147174	ED147175	ED147176
	ED147177	ED147178	ED147179	ED147180	ED147181	ED147182		
STATE LEGISLATION	(2)	ED103216	ED147172					
*STATE OF THE ART REVIEWS	(3)	ED075163	ED075230	ED083013*				
STATE OF THE ART REVIEWS	(2)	ED095020	ED125703					
STATE PLANS	(1)	ED157761						
*STATE PROGRAMS	(2)	ED114272*	ED134412					
STATE PROGRAMS	(1)	ED141259						
STATE ROLE	(1)	ED157761						
STATE SCHOOL DISTRICT RELATIONSHIP	(1)	ED088203						
STATE UNIVERSITIES	(1)	ED143296						
*STATEWIDE PLANNING	(3)	ED134412	ED149717	ED154326				
STATEWIDE PLANNING	(1)	ED142423						
STATISTICAL ANALYSIS	(1)	ED151927						
*STATISTICAL DATA	(1)	ED116920*						
STATISTICAL DATA	(5)	ED095312	ED124395	ED130849	ED142135	ED157844		
STATISTICAL STUDIES	(1)	ED142135						
STATISTICAL SURVEYS	(2)	ED095312	ED120416					
*STORAGE	(1)	ED144694						
STORAGE	(2)	ED145586	ED146701					
STUDENT ATTITUDES	(1)	ED151297						
STUDENT BEHAVIOR	(1)	ED086467*						
STUDENT EVALUATION	(1)	ED139967						
STUDENT INTERESTS	(1)	ED102058						
STUDENT OPINION	(2)	ED141069	ED151297					
STUDENT PARTICIPATION	(3)	ED091283	ED092418	ED144240*				
*STUDENT PROJECTS	(1)	ED141164						
STUDENT REACTION	(1)	ED151297						
STUDENT RIGHTS	(1)	ED136325						
*STUDENT TRANSPORTATION	(3)	ED091283	ED128929	ED150756				
STUDENT TRANSPORTATION	(2)	ED100069	ED133909					
SUBURBAN ENVIRONMENT	(1)	ED074694*						
SUCCESS FACTORS	(1)	ED150078						
SUPERVISORS	(1)	ED130437						
SUPPLEMENTARY READING MATERIALS	(1)	ED052973*						
*SURVEYS	(6)	ED103216	ED108881	ED134414	ED155018	ED156453	ED156454	
SURVEYS	(6)	ED119967*	ED120416	ED131552	ED133126	ED133909	ED141129	
*SYMPOSIA	(2)	ED142422	ED148611					
SYMPOSIA	(3)	ED074694*	ED118331	ED146693				
*SYSTEMS ANALYSIS	(2)	ED052107	ED144249					
SYSTEMS APPROACH	(1)	ED126946*						
SYSTEMS DEVELOPMENT	(1)	ED100006						
*TABLES (DATA)	(3)	ED088181	ED124395	ED137040				
TABLES (DATA)	(17)	ED044258	ED077088	ED096733	ED116538	ED120410	ED124302	ED128244
	ED130297	ED131554	ED133873	ED140435	ED140508	ED142135	ED144782	ED144850
	ED153326	ED153938						
*TAX EFFORT	(1)	ED133124						
TAXES	(1)	ED149450						
*TAX SUPPORT	(1)	ED149450						
TEACHER ATTITUDES	(1)	ED086467*						
*TEACHER CHARACTERISTICS	(1)	ED086467*						
*TEACHER DEVELOPED MATERIALS	(3)	ED107495*	ED129677	ED143593				
TEACHER DEVELOPED MATERIALS	(8)	ED096130	ED107849	ED147217	ED157681	ED157817	ED157818	ED157819
	ED157820							
*TEACHER EDUCATION	(2)	ED127243	ED140011					
TEACHER EDUCATION	(1)	ED018366*						
TEACHER IMPROVEMENT	(1)	ED141217						
TEACHER PROGRAMS	(1)	ED127243						
TEACHER ROLE	(1)	ED156429						
TEACHERS	(1)	ED151927						
*TEACHER WORKSHOPS	(1)	ED127243						

TEACHER WORKSHOPS	(1)	ED141217							
*TEACHING GUIDES	(47)	ED020113*	ED036840*	ED068350*	ED069551*	ED079027	ED092395	ED093836	
	ED099199	ED101959	ED106891	ED111644	ED117024	ED119757*	ED120341	ED127166	
	ED127181	ED132026	ED133192	ED135193	ED135194	ED135195	ED135229	ED136445	
	ED137075	ED141065*	ED141066*	ED141067*	ED141163	ED141165	ED146044	ED146045	
	ED146046	ED146047	ED146048	ED147187	ED147188	ED149979	ED149980	ED149987	
	ED149994	ED153821	ED153841	ED153842	ED153843	ED153844	ED153845	ED153859	
TEACHING GUIDES	(16)	ED041083*	ED067303	ED070579*	ED083316	ED092376	ED099188	ED101937	
	ED107493*	ED111665	ED120543	ED130833	ED137100	ED141164	ED147484	ED148561	
	ED157765								
TEACHING METHODS	(6)	ED098096	ED098100	ED127243	ED130301	ED132084	ED140011		
TEACHING MODELS	(1)	ED070579*							
TEACHING PROCEDURES	(1)	ED070579*							
TEACHING SKILLS	(1)	ED141217							
*TEACHING TECHNIQUES	(1)	ED141217							
TEACHING TECHNIQUES	(2)	ED091261	ED151946						
*TECHNICAL ASSISTANCE	(1)	ED149797							
*TECHNICAL EDUCATION	(3)	ED109447	ED125703	ED152385					
TECHNICAL EDUCATION	(4)	ED109448	ED124387	ED143400	ED149144				
TECHNICAL ILLUSTRATION	(3)	ED100004	ED100005	ED100006					
TECHNICAL INSTITUTES	(1)	ED109448							
*TECHNICAL OCCUPATIONS	(1)	ED120416							
TECHNICAL OCCUPATIONS	(3)	ED125703	ED130117	ED152385					
TECHNIQUES	(1)	ED082974							
*TECHNOLOGICAL ADVANCEMENT	(6)	ED074009*	ED088719*	ED105552	ED109448	ED122756	ED133440		
TECHNOLOGICAL ADVANCEMENT	(12)	ED055814	ED072666*	ED098112	ED100003	ED100004	ED100007	ED109447	
	ED127414*	ED145586	ED145595	ED146694	ED149144				
*TECHNOLOGY	(17)	ED067303	ED070649	ED072666*	ED083013*	ED091171	ED094977	ED108881	
	ED123033	ED130842	ED139670	ED141121	ED141187	ED142422	ED144826	ED149144	
	ED156566	ED157704							
TECHNOLOGY	(20)	ED040866*	ED074009*	ED075163	ED082974	ED088719*	ED096747	ED097212	
	ED106045	ED116878*	ED125857	ED125860	ED132047	ED134417	ED137187	ED139572	
	ED147464	ED149717	ED149797	ED149963	ED153826				
TECHNOLOGY TRANSFER	(1)	ED156566							
*TELECOMMUNICATION	(3)	ED066258	ED116878*	ED122756					
TELECOMMUNICATION	(3)	ED072666*	ED074694*	ED120341					
TEMPERATURE	(3)	ED029468*	ED125099	ED131539					
*TENNESSEE	(3)	ED134412	ED147157	ED149717					
TENNESSEE	(2)	ED078508	ED119312						
TENNESSEE (MEMPHIS)	(1)	ED122440							
*TESTS	(1)	ED125866							
*TEXAS	(2)	ED147158	ED148600						
*TEXTBOOK EVALUATION	(1)	ED070579*							
*TEXTBOOKS	(4)	ED020113*	ED070579*	ED071895	ED132025				
TEXTBOOK SELECTION	(1)	ED136325							
*THERMAL ENVIRONMENT	(6)	ED100003	ED100007	ED102715	ED146693	ED146694	ED147109		
THERMAL ENVIRONMENT	(10)	ED028831	ED059101*	ED122363	ED122440	ED130448	ED131539	ED131552	
	ED144240*	ED146702	ED147108						
*THERMODYNAMICS	(2)	ED071895	ED107521						
TIME SHARING	(1)	ED126946*							
*TRADE AND INDUSTRIAL EDUCATION	(1)	ED130117							
TRADE AND INDUSTRIAL EDUCATION	(1)	ED139967							
TRAFFIC REGULATIONS	(3)	ED147581	ED147582	ED147587					
*TRAFFIC SAFETY	(3)	ED147581	ED147582	ED147587					
TRAFFIC SIGNS	(3)	ED147581	ED147582	ED147587					
*TRANSPORTATION	(7)	ED088185	ED129606	ED137040	ED139967	ED147581	ED147582	ED147587	
TRANSPORTATION	(17)	ED072666*	ED074009	ED074694*	ED088181	ED103216	ED108881	ED110256	
	ED115557	ED116900*	ED122756	ED124369	ED126946*	ED127731	ED139572	ED140510	
	ED142232	ED142423							
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*TREND ANALYSIS	(1)	ED098112							
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ED 107 523

ATOMIC ENERGY COMMISSION, WASHINGTON, D. C. OFFICE OF INFORMATION SERVICES.
ED 070 649
ED 107 518
ED 107 519
ED 107 520
ED 107 521
ED 107 522
ED 107 524

ATOMIC ENERGY COMMISSION, WASHINGTON, D.C.
ED 030 459
ED 038 309
ED 059 896
ED 067 273

AUSTRALIAN SCIENCE EDUCATION PROJECT, TOORAK, VICTORIA.
ED 061 083
ED 068 350

BATTELLE MEMORIAL INST., COLUMBUS, OHIO. CENTER FOR IMPROVED EDUCATION.
ED 127 160
ED 127 161

BIOLOGICAL SCIENCES CURRICULUM STUDY, BOULDER, COLO.
ED 142 391
ED 142 391

BRADLEY, WHITWORTH ASSOCIATES, INC., MIAMI, FLA.
ED 077 088

BREVARD COUNTY SCHOOL BOARD, COCOA, FLA.
ED 067 303

BUILDING SYSTEMS INFORMATION CLEARINGHOUSE, MENLO PARK, CALIF.
ED 094 477
ED 096 733

BUREAU OF ELEMENTARY AND SECONDARY EDUCATION (DHEW/OE), WASHINGTON, D.C.
ED 067 303
ED 093 590
ED 093 649
ED 097 212
ED 101 957
EU 124 387
ED 125 890
ED 128 929
ED 130 821
ED 130 822
ED 130 831
EU 132 004
ED 132 009
ED 133 162
ED 133 223
ED 133 228
EU 133 229
ED 134 442
ED 134 443
ED 134 452
ED 149 979
ED 149 980
ED 149 987
ED 149 994
ED 153 819
ED 153 820
ED 153 821

BUREAU OF ELEMENTARY AND SECONDARY EDUCATION (DHEW/OE), WASHINGTON, D.C. DIV. OF STATE AGENCY COOPERATION.
ED 122 363
ED 122 364

BUREAU OF INTERGOVERNMENTAL AND INSTITUTIONAL RELATIONS (DOE), WASHINGTON, D.C. OFFICE OF EDUCATION, BUSINESS AN
ED 153 841
ED 153 842
ED 153 843
ED 153 844
ED 153 845
EU 153 846
ED 153 859

BUREAU OF LABOR STATISTICS (DOL), WASHINGTON, D.C.
ED 095 312

BUREAU OF OCCUPATIONAL AND ADULT EDUCATION (DHEW/OE), WASHINGTON, D.C.
ED 142 794

CALIFORNIA INST. OF TECH., PASADENA.
ED 117 010
ED 117 012

CALIFORNIA UNIV., BERKELEY. LAWRENCE HALL OF SCIENCE.
ED 152 529
ED 152 530
ED 152 531
EU 152 532

CALIFORNIA UNIV., BERKELEY. SCIENCE CURRICULUM IMPROVEMENT STUDY.
ED 020 112
ED 020 113
ED 056 860

CALIFORNIA UNIV., SAN DIEGO, LA JOLLA. INST. OF MARINE RESOURCES.
ED 106 120

CANADIAN EDUCATION ASSOCIATION, TORONTO (ONTARIO).
ED 144 240

CANADIAN SCHOOL TRUSTEES ASSOCIATION, OTTAWA (ONTARIO).
ED 133 918

CENTER FOR CALIFORNIA PUBLIC AFFAIRS, CLAREMONT.
ED 105 845

CITIZENS ADVISORY COMMITTEE ON ENVIRONMENTAL QUALITY.
ED 052 059
EU 119 952
ED 119 953
ED 145 463

CITY UNIV. OF NEW YORK, N.Y. CITY COLL.
ED 107 445

COLORADO STATE DEPT. OF EDUCATION, DENVER.
ED 119 957
ED 128 929

COLORADO STATE DEPT. OF EDUCATION, DENVER. INTERSTATE ENERGY CONSERVATION LEADERSHIP.
ED 122 363
ED 122 364

COLORADO STATE UNIV., FT. COLLINS. SOLAR ENERGY APPLICATIONS LAB.
ED 144 701
ED 144 702

COLSTON RESEARCH SOCIETY, BRISTOL (ENGLAND).
ED 074 694

COMMISSION ON COLL. PHYSICS, COLLEGE PARK, MD.
ED 041 747

COMMUNITY SERVICES ADMINISTRATION (DHEW), WASHINGTON, D.C.
ED 157 789

CONGRESS OF THE U.S., WASHINGTON, D.C. HOUSE COMMITTEE ON EDUCATION AND LABOR.
ED 141 944

CONGRESS OF THE U.S., WASHINGTON, D.C. HOUSE COMMITTEE ON INTERIOR AND INSULAR AFFAIRS.
ED 123 092

CONGRESS OF THE U.S., WASHINGTON, D.C. HOUSE COMMITTEE ON SCIENCE AND TECHNOLOGY.
ED 119 954

CONGRESS OF THE U.S., WASHINGTON, D.C. SENATE COMMITTEE ON HUMAN RESOURCES.
ED 140 423
ED 140 424

CONGRESS OF THE U.S., WASHINGTON, D.C. SENATE COMMITTEE ON INTERIOR AND INSULAR AFFAIRS.
ED 094 020
ED 127 109

CONGRESS OF THE U.S., WASHINGTON, D.C. SENATE COMMITTEE ON LABOR AND PUBLIC WELFARE.
ED 094 474

CONSOLIDATED EDISON CO., BROOKLYN, N.Y.
ED 128 908

CONSUMERS POWER CO., JACKSON, MICH.
ED 133 831

CORVALLIS SCHOOL DISTRICT 509J, OREG.
ED 099 188

COUNCIL FOR EDUCATIONAL DEVELOPMENT AND RESEARCH, WASHINGTON, D.C.
ED 156 429

COUNCIL OF EDUCATIONAL FACILITY PLANNERS, COLUMBUS, OHIO.
ED 120 896
ED 125 071
ED 126 593
ED 147 996

COUNCIL OF PLANNING LIBRARIANS, MONTICELLO, ILL.
ED 115 539
ED 115 540
ED 115 547
ED 115 551
ED 115 556
ED 115 557

COUNCIL ON ENVIRONMENTAL QUALITY, WASHINGTON, D.C.
ED 116 921

DADE COUNTY PUBLIC SCHOOLS, MIAMI, FLA.
ED 079 027
ED 093 656

DALLAS INDEPENDENT SCHOOL DISTRICT, TEX.
ED 124 387

DEL MOD SYSTEM, DOVER, DEL.
ED 096 134
ED 119 962

DELAWARE STATE DEPT. OF PUBLIC INSTRUCTION, DOVER.
ED 096 130

DELAWARE UNIV., NEWARK. COLL. OF EDUCATION.
ED 141 163
ED 141 164
ED 141 165

DEPARTMENT OF AGRICULTURE, WASHINGTON, D.C.
ED 118 331

DEPARTMENT OF COMMERCE, WASHINGTON, D.C.
ED 144 701
ED 144 702

DEPARTMENT OF ENERGY, WASHINGTON, D.C.
ED 152 529
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ED 152 532
ED 156 429
ED 157 744

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT, WASHINGTON, D.C.
ED 116 878
ED 146 695

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT, WASHINGTON, D.C. OFFICE OF POLICY DEVELOPMENT AND RESEARCH.
ED 146 042

DEPARTMENT OF THE INTERIOR, WASHINGTON, D.C.
ED 114 268
ED 125 860

DETROIT EDISON CO., MICH.
ED 133 831

DETROIT PUBLIC SCHOOLS, MICH.
ED 133 831

DUTCHESS COUNTY BOARD OF COOPERATIVE EDUCATIONAL SERVICES, POUGHKEEPSIE, N.Y.
ED 092 395

DUVAL COUNTY SCHOOL BOARD, JACKSONVILLE, FLA.
ED 139 967

EBASCO SERVICES INC., NEW YORK, N.Y.
ED 156 453
ED 156 454

ECONOMIC DEVELOPMENT ADMINISTRATION (DOC), WASHINGTON, D.C.
ED 149 797

ECONOMICS, STATISTICS, AND COOPERATIVES SERVICE (DOA), WASHINGTON, D.C.
ED 149 480

EDMONDS SCHOOL DISTRICT 15, LYNNWOOD, WASH.
ED 099 236

EDUCATION COMMISSION OF THE STATES, DENVER, COLO. DEPT. OF RESEARCH AND INFORMATION SERVICES.
ED 103 216

EDUCATION COMMISSION OF THE STATES, DENVER, COLO. NATIONAL ASSESSMENT OF EDUCATIONAL PROGRESS.
ED 127 203

EDUCATION DEVELOPMENT CENTER, INC., NEWTON, MASS.
ED 144 789

EDUCATIONAL CHALLENGES, INC., WASHINGTON, D.C.
ED 104 670

EDUCATIONAL FACILITIES LABS., INC., NEW YORK, N.Y.
ED 082 324
ED 133 907

ELECTRIC ENERGY ASSOCIATION, NEW YORK, N.Y.
ED 083 674
ED 096 747

EMPLOYMENT AND TRAINING ADMINISTRATION (DOL), WASHINGTON, D.C.
ED 153 034

ENERGY AND MAN'S ENVIRONMENT INC., PORTLAND.
ED 133 192
ED 133 193
ED 133 194
ED 133 195
ED 133 196

ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION, OAK RIDGE, TENN.
ED 129 602
ED 129 603
ED 129 605
ED 129 606
ED 133 173

ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION, WASHINGTON, D.C.
ED 127 243
ED 129 677
ED 130 844
ED 130 845
ED 130 846
ED 130 847
ED 130 848
ED 132 024
ED 132 025
ED 132 026
ED 133 172
ED 134 417
ED 141 187
ED 141 217
ED 143 493
ED 146 059
ED 146 695
ED 152 385

ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION, WASHINGTON, D.C. DIV. OF LABOR RELATIONS.
ED 120 416
ED 125 703

ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION, WASHINGTON, D.C. DIV. OF SOLAR ENERGY.
ED 144 828
ED 146 694

ENERGY TASK FORCE, WASHINGTON, D.C.
ED 128 904
ED 140 465

ENVIRO/INFO, GREEN BAY, WIS.
ED 077 704
ED 089 946

ENVIRONMENTAL ALERT GROUP, LOS ANGELES, CALIF.
ED 083 013

ENVIRONMENTAL LAW INST., WASHINGTON, D.C.
ED 142 423
ED 142 424

ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, D. C.
ED 091 171
ED 103 213
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ED 152 535

ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, D.C. OFFICE OF RESEARCH AND DEVELOPMENT.
ED 149 450

ENVIRONMENTAL RESEARCH INST. OF MICHIGAN, ANN ARBOR.
ED 149 797

ERIC CLEARINGHOUSE FOR SOCIAL STUDIES/SOCIAL SCIENCE EDUCATION, BOULDER, COLO.
ED 091 283

ERIC CLEARINGHOUSE ON READING AND COMMUNICATION SKILLS, URBANA, ILL.
ED 155 798

ERIC INFORMATION ANALYSIS CENTER FOR SCIENCE, MATHEMATICS, AND ENVIRONMENTAL EDUCATION, COLUMBUS, OHIO.
ED 130 833

ESSO EDUCATION FOUNDATION.
ED 075 230

EXECUTIVE OFFICE OF THE PRESIDENT, WASHINGTON, D.C. ENERGY POLICY AND PLANNING.
ED 141 129

EXXON CORP., NEW YORK, N.Y.
ED 140 465

FAIRFIELD UNIV., CONN.
ED 116 878
ED 122 734
ED 134 233

FEDERAL ENERGY ADMINISTRATION, WASHINGTON, D.C.
ED 115 857
ED 124 426
ED 125 885
ED 133 192
ED 133 193
ED 133 194
ED 133 195
ED 133 196
ED 133 873
ED 140 508
ED 141 186
ED 143 296
ED 144 440
ED 148 059

FEDERAL ENERGY ADMINISTRATION, WASHINGTON, D.C. OFFICE OF INDUSTRIAL PROGRAMS.
ED 140 510

FLORIDA STATE DEPT. OF EDUCATION, TALLAHASSEE.
ED 077 088

FLORIDA STATE DEPT. OF EDUCATION, TALLAHASSEE. OFFICE OF ENVIRONMENT EDUCATION.
ED 157 759
ED 157 761
ED 157 765

FLORIDA STATE UNIV., TALLAHASSEE.
ED 127 243
ED 147 217

FLORIDA STATE UNIV., TALLAHASSEE. COLL. OF EDUCATION.
ED 106 213
ED 143 595

FLORIDA STATE UNIV., TALLAHASSEE. ENVIRONMENTAL EDUCATION PROJECT.
ED 129 677
ED 141 217
ED 141 259

FORD FOUNDATION, NEW YORK, N.Y.
ED 134 450
ED 137 068

FRIENDS OF THE EARTH FOUNDATION, SAN FRANCISCO, CALIF.
ED 137 075

GARY CITY PUBLIC SCHOOL SYSTEM, IND.
ED 050 063

GATEWAY TECHNICAL INST., KENOSHA, WIS.
ED 143 400

GENERAL ELECTRIC CO., PHILADELPHIA, PA. SPACE DIV.
ED 100 004
ED 100 007

GEORGE WASHINGTON UNIV., WASHINGTON, D.C. INST. FOR EDUCATIONAL LEADERSHIP.
ED 130 301

GEORGETOWN UNIV., WASHINGTON, D.C. CENTER FOR STRATEGIC AND INTERNATIONAL STUDIES.
ED 118 363

GEORGIA STATE DEPT. OF EDUCATION, ATLANTA.
ED 137 187

GEORGIA STATE UNIV., ATLANTA.
ED 137 187

GLOBAL DEVELOPMENT STUDIES INST., MADISON, N.J.
ED 129 675

GOVERNOR'S ENERGY ADVISORY COUNCIL, AUSTIN, TEX.
ED 152 773

GRAND VALLEY STATE COLLEGES, ALLENDALE, MICH. URBAN AND ENVIRONMENTAL STUDIES INST.
ED 134 416

GREATER VICTORIA ENVIRONMENTAL CENTER (BRITISH COLUMBIA).
ED 127 731

HARRIS (LOUIS) AND ASSOCIATES, INC., NEW YORK, N.Y.
ED 156 453
ED 156 484

HARVARD UNIV., CAMBRIDGE, MASS. HARVARD PROJECT PHYSICS.
ED 071 894
ED 071 895

HAWAII UNIV., HONOLULU. EAST-WEST CENTER.
ED 098 112
ED 142 232

HIGHLINE PUBLIC SCHOOLS, SEATTLE, WASH.
ED 132 004
ED 132 009
ED 133 162

HONEYWELL, INC., MINNEAPOLIS, MINN. SYSTEMS AND RESEARCH CENTER.
ED 136 443

HOUSTON UNIV., TEX. CLEAR LAKE CITY BRANCH.
ED 155 018

HOUSTON UNIV., TEX. COLLEGE OF ARCHITECTURE.
ED 148 609
ED 148 610
ED 148 611

ILLINOIS ASSOCIATION OF SCHOOL BOARDS, SPRINGFIELD.
ED 130 437

ILLINOIS INST. FOR ENVIRONMENTAL QUALITY, CHICAGO.
ED 114 272

ILLINOIS STATE BOARD OF HIGHER EDUCATION, SPRINGFIELD.
ED 114 272

ILLINOIS STATE OFFICE OF EDUCATION, SPRINGFIELD.
ED 130 117
ED 149 979
ED 149 980
ED 149 987
ED 149 994

INDIANA UNIV., BLOOMINGTON. SCHOOL OF PUBLIC AND ENVIRONMENTAL AFFAIRS.
ED 116 979

INTERNATIONAL ATOMIC ENERGY AGENCY, VIENNA (AUSTRIA).
ED 070 606
ED 070 607

INTERNATIONAL CITY MANAGEMENT ASSOCIATION, WASHINGTON, D.C.
ED 126 594

INTERTECHNOLOGY CORP., WARRENTON, VA.
ED 119 320

IOWA STATE DEPT. OF PUBLIC INSTRUCTION, DES MOINES.
ED 121 569
ED 146 044
ED 146 045
ED 146 046
ED 146 047

ED 146 048

IOWA STATE ENERGY POLICY COUNCIL, DES MOINES.
ED 146 044
ED 146 045
ED 146 046
ED 146 047
ED 146 048

JET PROPULSION LAB., PASADENA, CALIF.
ED 105 552

JOINT COUNCIL ON ECONOMIC EDUCATION, NEW YORK, N.Y.
ED 102 058

JOINT ECONOMIC COMMITTEE, WASHINGTON, D.C.
ED 075 163

KAISER ALUMINUM AND CHEMICAL CORP., OAKLAND, CALIF.
ED 072 666

KINGSPORT CITY SCHOOLS, TENN.
ED 108 891

LIBRARY OF CONGRESS, WASHINGTON, D.C. CONGRESSIONAL RESEARCH SERVICE.
ED 116 924
ED 124 395

LOUISIANA STATE DEPT. OF EDUCATION, BATON ROUGE.
ED 120 343

MADISON PUBLIC SCHOOLS, WIS. PUBLIC INFORMATION OFFICE.
ED 092 418

MAINE AUDUBON SOCIETY, FALMOUTH.
ED 147 108
ED 147 109
ED 147 187
ED 147 188

MARSHALL UNIV., HUNTINGTON, W. VA. DEPT. OF HOME ECONOMICS.
ED 130 949

MARYLAND STATE DEPT. OF EDUCATION, BALTIMORE.
ED 142 422

MARYLAND UNIV., COLLEGE PARK. DEPT. OF PHYSICS AND ASTRONOMY.
ED 075 230

MASSACHUSETTS AUDUBON SOCIETY, LINCOLN. MATHEWAY ENVIRONMENTAL EDUCATION INST.
ED 093 765

MASSACHUSETTS INST. OF TECH., CAMBRIDGE. ENERGY LAB.
ED 115 857

MASSACHUSETTS STATE DEPT. OF EDUCATION, BOSTON.
ED 150 755
ED 150 756

MEMPHIS CITY SCHOOL SYSTEM, TENN.
ED 078 508
ED 122 440

MIAMI-DADE COMMUNITY COLL., FLA.
ED 144 826

MICHIGAN ASSOCIATION OF SCHOOL ADMINISTRATORS, EAST LANSING.
ED 133 831

MINNESOTA ACADEMY OF SCIENCE, MINNEAPOLIS.
ED 116 900

MINNESOTA STATE DEPT. OF EDUCATION, ST. PAUL.
ED 154 999

MINNESOTA STATE ENERGY AGENCY, ST. PAUL.
ED 151 497
ED 154 999

MINNESOTA UNIV., MINNEAPOLIS.
ED 149 450

MOBILE COUNTY PUBLIC SCHOOLS, ALA.
ED 134 445

MONTGOMERY COUNTY PUBLIC SCHOOLS, ROCKVILLE, MD.
ED 134 443

NATCHITOCHES PARISH SCHOOL BOARD, LA.
ED 107 809

NATIONAL ACADEMY OF ENGINEERING, WASHINGTON, D.C. COMMISSION ON EDUCATION.
ED 125 849

NATIONAL ACADEMY OF SCIENCES - NATIONAL RESEARCH COUNCIL, WASHINGTON, D.C.
ED 148 593

NATIONAL ACADEMY OF SCIENCES - NATIONAL RESEARCH COUNCIL, WASHINGTON, D.C. BUILDING RESEARCH ADVISORY BOARD.
ED 119 375

NATIONAL ACADEMY OF SCIENCES - NATIONAL RESEARCH COUNCIL, WASHINGTON, D.C. COMMISSION ON NATURAL RESOURCES.
ED 152 935

NATIONAL ACADEMY OF SCIENCES - NATIONAL RESEARCH COUNCIL, WASHINGTON, D.C. COMMITTEE ON SOLAR ENERGY IN THE NEAT
ED 145 595

NATIONAL ACADEMY OF SCIENCES, WASHINGTON, D.C.
ED 125 886

NATIONAL ADVISORY COUNCIL ON VOCATIONAL EDUCATION, WASHINGTON, D.C.
ED 149 144

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION, NEW YORK, N. Y. GODDARD INST. FOR SPACE STUDIES.
ED 142 942

NATIONAL ASSOCIATION FOR ENVIRONMENTAL EDUCATION, MIAMI, FLA.
ED 120 609

NATIONAL ASSOCIATION OF COLL. AND UNIV. BUSINESS OFFICERS, WASHINGTON, D.C.
ED 122 676
ED 118 904
ED 140 465

NATIONAL ASSOCIATION OF SECONDARY SCHOOL PRINCIPALS, WASHINGTON, D.C.
ED 098 096
ED 098 100
ED 108 367

NATIONAL BUREAU OF STANDARDS (DOC), WASHINGTON, D.C.
ED 146 693
ED 146 694
ED 146 695

NATIONAL BUREAU OF STANDARDS (DOC), WASHINGTON, D.C. INST. FOR APPLIED TECHNOLOGY.
ED 102 715
ED 144 249

NATIONAL CENTER FOR EDUCATION STATISTICS (DHEW), WASHINGTON, D.C.
ED 127 203

NATIONAL CENTER FOR PRODUCTIVITY AND QUALITY OF WORKING LIFE, WASHINGTON, D.C.
ED 126 594

NATIONAL CENTER FOR RESOURCE RECOVERY, INC., WASHINGTON, D.C.
ED 098 096
ED 098 100

NATIONAL EDUCATION ASSOCIATION, WASHINGTON, D.C.
ED 104 670
ED 154 996

NATIONAL FIELD RESEARCH CENTER INC., IOWA CITY, IOWA.
ED 147 114
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NATIONAL INST. OF EDUCATION (DHEW), WASHINGTON, D.C.
ED 091 283
ED 126 894
ED 140 896
ED 123 042
ED 145 699
ED 126 553
ED 130 301
ED 130 833
ED 134 233
ED 136 325
ED 136 356

ED 152 096
ED 155 738
ED 156 474

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (DOC), ROCKVILLE, MD. NATIONAL SEA GRANT PROGRAM.
ED 093 695
ED 106 120

NATIONAL PLANNING ASSOCIATION, WASHINGTON, D.C.
ED 114 348
ED 127 414

NATIONAL PUBLIC RADIO, WASHINGTON, D.C.
ED 130 301

NATIONAL RECREATION AND PARK ASSOCIATION, ARLINGTON, VA.
ED 141 186

NATIONAL SCHOOL BOARDS ASSOCIATION, EVANSTON, ILL.
ED 088 203

NATIONAL SCHOOL PUBLIC RELATIONS ASSOCIATION, ARLINGTON, VA.
ED 133 909

NATIONAL SCIENCE FOUNDATION, WASHINGTON, D.C.
ED 041 747
ED 052 167
ED 064 094
ED 078 130
ED 107 495
ED 108 881
ED 110 348
ED 116 479
ED 119 992
ED 121 580
ED 122 866
ED 127 414
ED 134 422
ED 134 424
ED 134 426
ED 142 424
ED 151 946

NATIONAL SCIENCE FOUNDATION, WASHINGTON, D.C. DIV. OF POLICY RESEARCH AND ANALYSIS.
ED 145 586

NATIONAL SCIENCE FOUNDATION, WASHINGTON, D.C. DIV. OF SCIENCE RESOURCES STUDIES.
ED 130 449
ED 151 142

NATIONAL SCIENCE FOUNDATION, WASHINGTON, D.C. NATIONAL SCIENCE BOARD.
ED 141 121

NATIONAL SCIENCE FOUNDATION, WASHINGTON, D.C. RANN PROGRAM.
ED 093 695
ED 096 154
ED 099 962
ED 100 003
ED 100 004
ED 100 005
ED 100 006
ED 100 007
ED 105 552
ED 119 340
ED 127 090
ED 133 149
ED 133 126
ED 134 443
ED 154 507

NATIONAL SCIENCE TEACHERS ASSOCIATION, WASHINGTON, D.C.
ED 111 662
ED 111 663
ED 111 664
ED 153 841
ED 153 842
ED 153 843
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ED 153 859
ED 157 744
ED 157 817
ED 157 818
ED 157 819
ED 157 820

NEBRASKA UNIV., LINCOLN.
ED 121 580

NEW ENGLAND REGIONAL COMMISSION.
ED 113 857

NEW HAMPSHIRE STATE DEPT. OF EDUCATION, CONCORD.
ED 149 487

NEW JERSEY STATE COUNCIL FOR ENVIRONMENTAL EDUCATION, UPPER MONTCLAIR.
ED 130 821
ED 130 822
ED 130 831

NEW JERSEY STATE DEPT. OF EDUCATION, TRENTON.
ED 144 201

NEW JERSEY STATE DEPT. OF EDUCATION, TRENTON. DIV. OF RESEARCH, PLANNING, AND EVALUATION.
ED 133 223
ED 133 228
ED 133 229

NEW MEXICO STATE UNIV., LAS CRUCES. COOPERATIVE EXTENSION SERVICE.
ED 118 331

NEW YORK CITY BOARD OF EDUCATION, BROOKLYN, N.Y.
ED 099 962

NEW YORK CITY BOARD OF EDUCATION, N.Y.
ED 154 507

NEW YORK STATE EDUCATION DEPT., ALBANY. BUREAU OF GENERAL EDUCATION CURRICULUM DEVELOPMENT.
ED 148 501

NEW YORK STATE EDUCATION DEPT., ALBANY. OFFICE OF INSTRUCTIONAL SERVICES.
ED 101 959

NEW YORK STATE INTERDEPARTMENTAL FUEL AND ENERGY COMMITTEE, ALBANY.
ED 088 183
ED 088 184
ED 088 185

NEW YORK STATE PUBLIC SERVICE COMMISSION, ALBANY. OFFICE OF ECONOMIC RESEARCH.
ED 088 181

NEW YORK STATE SCHOOL BOARDS ASSOCIATION, ALBANY.
ED 116 331

NINETY SIX HIGH SCHOOL, S. C.
ED 095 024

NORTH CAROLINA STATE DEPT. OF PUBLIC INSTRUCTION, RALEIGH. DIV. OF SCIENCE EDUCATION.
ED 092 376

NORTH DAKOTA STATE BOARD FOR VOCATIONAL EDUCATION, BISMARCK.
ED 147 464

NORTH DAKOTA STATE UNIV., FARGO.
ED 149 450

NUFFIELD FOUNDATION, LONDON (ENGLAND).
ED 069 551

OAK RIDGE ASSOCIATED UNIVERSITIES, TENN.
ED 038 309
ED 152 385
ED 152 529
ED 152 530
ED 152 531
ED 152 532

OAK RIDGE ASSOCIATED UNIVERSITIES, TENN. MANPOWER DEVELOPMENT DIV.
ED 120 416
ED 125 703

OAK RIDGE NATIONAL LAB., TENN.
ED 149 717

OFFICE OF CONSUMER AFFAIRS, WASHINGTON, D.C.
ED 147 581
ED 147 582
ED 147 587

OFFICE OF EDUCATION (DHEW), WASHINGTON, D.C.
ED 093 745
ED 107 809
ED 123 042
ED 127 160
ED 127 161
ED 130 949
ED 137 187
ED 141 163
ED 141 164
ED 141 165
ED 144 826
ED 147 108
ED 147 109
ED 147 187
ED 147 188
ED 148 600
ED 148 609
ED 148 610
ED 148 611
ED 157 681
ED 157 683

OFFICE OF EDUCATION (DHEW), WASHINGTON, D.C. BUREAU OF RESEARCH.
ED 071 894
ED 071 895

OFFICE OF EDUCATION (DHEW), WASHINGTON, D.C. OFFICE OF ENVIRONMENTAL EDUCATION.
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